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The Honourable Jake Epp
Minister of Energy, Mines and Resources
Ottawa, Ontario

Dear Minister:

I am pleased to submit this report which describes the financial performance of the oil and gas industry in Canada during 1989. The report is based on data from 120 companies, accounting for some 90% of total revenues of the petroleum industry, and therefore, reflects the performance of the entire industry in Canada.

In 1989, the overall industry experienced a 39% drop in net income largely due to extraordinary or unusual transactions. By comparison, internal cash flow, unaffected by unusual transactions, declined 1% to $8.9 billion. The gain from the recovery of crude oil prices from 1988 levels and the higher sales values of marketable natural gas were more than offset by higher operating costs and interest charges. The rise in interest expenses was primarily the result of an increase in long–term debt for takeover purposes.

Upstream capital budgets were reduced in 1989 following a crude oil price decline in 1988 to its lowest average level in nearly a decade. The continuing uncertainty about future oil prices together with the rationalization of company operations witnessed by the sale and purchase of oil and gas properties, and significant takeovers of corporations caused overall capital outlays to decline 16% to $7.7 billion in 1989. This decrease together with a virtually unchanged cash flow resulted in a reinvestment rate of 85%, a drop from 96% in 1988. The reinvestment rate was unusually high in 1988 because companies advanced their capital expenditures to take advantage of drilling incentives that were about to be reduced or eliminated.

The Canadian ownership of upstream revenues increased to 43.4% in 1989 due to the takeover of a number of foreign–controlled companies by Canadian–controlled companies. The rise in Canadian ownership was the first such increase since 1986.

Respectfully submitted,

Pierre Camu
Chairman

June 29, 1990

New and Noteworthy

New information is presented in this Monitoring Report and, as in the past, it is crucial that the report be read with a number of caveats to which attention is drawn under "Noteworthy".

New

- To assist in the understanding of the analysis, a number of new charts have been added throughout the report on:
  - interest rates
  - crude oil prices: West Texas Intermediate (WTI)
  - exchange rates
  - federal sales and excise taxes

Noteworthy

- A number of Canadian-controlled companies switched from the Full Cost to the Successful Efforts method of accounting. This change necessitated a restatement of the financial results back to the inception of the companies' activities. The restatement resulted in write-offs of over $3 billion of fixed assets, with the corresponding changes in deferred taxes and shareholder equity, but did not affect the levels of cash flow. As a result, total assets reported in the 1988 Monitoring Report are over $3 billion higher than those published for the beginning of the current period in this report.

- Prior to the sale of Texaco Inc.'s 78% interest in Texaco Canada Inc., Texaco Canada Inc. transferred interests in several foreign and Canadian properties to Texaco Canada Petroleum Inc., then a wholly owned subsidiary of Texaco Canada Inc. Texaco Canada Inc. declared a dividend 'in specie' of one common share of Texaco Canada Petroleum Inc. for each outstanding share of the corporation.

- As a consequence of Panarctic Oil Ltd.'s changed circumstances with respect to its business and exploration activities, the Company adopted the successful efforts method of accounting on a prospective basis effective January 1, 1989. Previously the activities of the Company were considered to be in the exploratory stage and all expenses, less recoveries from contract operations and revenue realized on sale of crude oil production, were capitalized.

As a result of this change the Company carried out an impairment review of the non-producing oil and gas properties which resulted in a provision for impairment of $262 million being recorded against earnings in the current year.

• Significant restructuring of the Canadian petroleum industry continued in 1989, due to numerous acquisitions and mergers. Of particular interest were the following, shown in chronological order:

— Lasmo Canada Inc. acquired 96% of Tiber Energy Corporation.

— Sceptre Resources Limited purchased Oakwood Petroleums Ltd.

— Imperial Oil Limited acquired Texaco Canada Inc.

— Conquest Exploration Company purchased 90% of Universal Explorations Ltd.

— Norcen Energy Resources Limited acquired the oil and gas properties of Westmin Resources Limited.

— Bow Valley Industries Limited acquired producing assets of Bonanza Oil and Gas Ltd.

— Petromet Resources Ltd. purchased Bonanza Oil and Gas Ltd. from Poco Petroleums Ltd.

— Paramount Holdings of Bermuda acquired Excel Energy Inc.

— PanCanadian Petroleum Limited purchased Husky Oil Operations Ltd.'s oil and gas interests in the Westerose and Benjamin Creek areas.

— Saskatchewan Oil & Gas Corporation acquired ICG Resources Ltd. from Inter–City Gas Corporation.

— Kerr–McGee Corporation acquired Maxus Energy Canada Ltd., now known as Kerr–McGee Canada Ltd.

— Manoil consolidated its two subsidiaries, Pembina Resources Limited and Western Decalta Petroleum (1977) Limited into Pembina Resources Limited.

— Parkland Industries Ltd. purchased oil and gas properties from Armenco Ltd.

— Poco Petroleum Ltd. acquired the oil and gas properties of Tintagel Energy Corporation.

— Amoco Canada Petroleum Co. Ltd. sold some of its Alberta oil and gas properties to Fletcher Challenge Ltd., LASMO Canada Inc., and Summit Resources Limited.

— Conwest Exploration Company Limited purchased the oil and gas properties of Denison Mines Ltd.

— Mark Resources acquired the outstanding shares of Domtar Energy Inc.

— Encor Inc. disposed of some of its oil and gas properties. Among the acquirers were Numac Oil & Gas Ltd., ATCOR Ltd., and Summit Resources Limited.

— Trical Resources Inc. acquired 95% of Voyager Energy Inc. at the end of 1989. In early 1990, the two companies merged, maintaining the Voyager name, and purchased 46% of Excel Energy Inc.

— Mobil Oil Corporation sold a number of its oil and gas properties to Saskatchewan Oil and Gas Corporation.

— Inter–City Gas Corp. acquired certain utility and propane businesses from Westcoast Energy Inc.

— Chevron Canada Resources Limited acquired Husky Oil Ltd.'s interest in the Amauligak mega project and Beaufort Sea assets.

— Ladd Exploration Company purchased the oil and gas assets of General Electric Canada Holdings Limited.

— Trilogy Resources Corporation acquired the oil and gas assets of Teck Corporation for the issuance of 50 million common shares, resulting in Teck owning approximately 75% of the outstanding common shares of Trilogy.

— Ranchmen's Resources Ltd. amalgamated with Consolidated Trans–Canada Resources Ltd.

— North Canadian Oils Limited acquired the 47% share of Coseka Resources Limited previously held by Bramalea Ltd.

— Cabre Exploration Ltd. and Wellore Energy Inc. amalgamated, keeping the name Cabre Exploration Ltd.

• Appendix A1 'Year in Review' sets out in detail events worthy of note.

• Many numbers in the body of the report are rounded to improve readability. Percentage changes, however, are calculated on the basis of detailed figures shown in Appendix B.

• While 145 companies have reported to the PMA (see Appendix E), this report is based on data from 120 companies. Twenty–five small companies have been excluded due to the lack of comparable data for the preceding period.

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Summary and Highlights

General Economic Background

Canada's real Gross Domestic Product (GDP) grew at an annual rate of 2.9% to $461 billion (1981 dollars) during 1989, as private capital formation was up by 7%, driven by machinery and equipment purchases. Real personal expenditures on consumer goods and services grew by 4% to $257 billion in 1989. Government investment rose by 8% but government current expenditures rose by less than the increase in real GDP. Imports rapidly increased and exports declined by 1% below 1988 levels. The petroleum industry contributed 12.2% of Canada's real gross domestic product in 1989.

Inflation, as measured by the Consumer Price Index, increased during the current period at an annual rate of 5% against 4.1% in 1988. Unemployment dropped from 7.8% in 1988 to 7.5% in 1989 as employment grew from 12.2 million to 12.5 million persons.

Financial Performance

Total Operations

- Profits: *Net income from total operations declined 39% or $860 million to $1.3 billion in 1989 vs. 1988.* All industry segments, other than foreign activities, registered declines in net income.

- Total net income for foreign-controlled companies fell 27% to $860 million in 1989 as lower net income was recorded for downstream and 'other Canadian' operations, although net income was higher for upstream operations and foreign activities. Net income for Canadian-controlled companies dropped by 54% to $460 million as decreases for upstream, downstream and 'other Canadian' operations more than offset income increases for foreign activities.

- The rate of return on shareholders' equity for the total Canadian petroleum industry was 3.3% in 1989 against 5.5% in 1988. The five-year average rate of return for the period ending in 1989 decreased to 3.7% from an average of 4.9% for that ending in 1988. The return on the capital employed by the Canadian petroleum industry in 1989 declined to 3.9% from 4.8% in 1988.

Upstream Operations

- *Revenues from upstream operations* rose 9% to $17.2 billion in 1989 over 1988. Upstream net income fell 21% to $625 million in 1989 over 1988. Cash flow rose 11% to $6.4 billion. The reduction in net income was brought about by a combination of an extraordinary loss of $180 million in 1989 vs. an extraordinary gain of $230 million in 1988. Upstream net income prior to extraordinary items rose 44% to $800 million in 1989. An increase in revenues together with reduced interest expenses, and unchanged non-cash charges more than offset higher current and deferred taxes, royalty payments and operating costs.

Downstream Operations

- *Total downstream revenues* increased 7% to $28.8 billion due to an increase in sales volumes. In addition, increased revenues resulted from the flow through to consumers of higher federal sales and excise taxes, up 10% and feedstock costs up 9%. Net income fell 38% to $925 million in 1989 over 1988. Higher revenues were outweighed by increased expenses in almost all categories resulting in reduced profits.

Net income for oil products operations dropped 35% to $585 million in 1989 causing the return on capital employed to decrease to 5.9% from 7.9% in 1988.

Sources and Uses of Funds

Internal Cash Flow

- *Internal cash flow from total operations decreased 1% to $8.9 billion* in 1989. Higher crude oil prices and natural gas sales volumes, and lower income taxes were more than offset by the impact of higher sales and excise taxes, and increased interest and operating costs. Cash flow decreased in all industry segments with the exception of upstream and foreign activities.

Net External Sources

- *Net external sources of funds were $5.1 billion in 1989 vs. $500 million in 1988.* New long-term debt exceeded redemptions by $3.1 billion compared with $430 million of net redemptions in 1988. New equity, net of repurchases, was $2 billion in 1989 vs. $940 million in 1988.

Discretionary Uses

- In 1989, the industry decreased its net capital outlay by 14% to $7.5 billion. Dividend payments fell 44% from $2.5 billion to $1.4 billion. In 1989, the excess of 'All Other Uses' over 'All Other Sources' resulted from the purchase of assets and takeover activity. The net draw-down of working capital of $3.3 billion in 1988 was in contrast to the smaller draw–down of $130 million in the working capital position in 1989.

- *Incentive Grants* (as deductions to gross capital expenditures) were down from $265 million in 1988 (partly PIP grants) to $140 million (mainly CEDIP and CEIP grants) in 1989.

Capital Expenditures

- *Total Capital Expenditures* in 1989 decreased 16% or $1.4 billion to $7.7 billion, with domestic expenditures declining 16% and outlays abroad dropping 13%. Upstream spending, representing 70% of the total, fell 20% to $5.4 billion.

- *Exploration Expenditures in Canada* fell 18% to $2.4 billion in 1989, with expenditures decreasing 19% in the provinces and 18% on Canada Lands. Expenditures on Canada Lands accounted for 17% of the total in both 1988 and 1989. Outlays by foreign-controlled companies were 12% lower in 1989 than in 1988, while those for Canadian-controlled companies were down by 25%.

- *Downstream Expenditures* declined 4% to $1.3 billion in 1989 over 1988. Reduced expenditures for refineries more than offset increased spending on petrochemical plants and marketing outlets.

Reinvestment Rates

- Net capital expenditures absorbed 85% of the industry's internal cash flow in 1989, down from 96% in 1988. Upstream capital expenditures totalled 82% of cash flow, down 28 percentage points from 1988.

Dividends

- *Dividends fell 44% to $1.4 billion in 1989 over 1988.* Dividends by Canadian-controlled companies decreased 43% to $565 million for a payout rate of 123%. Payments by foreign-controlled companies fell 46% to $805 million for a payout rate of 93%. A number of unique transactions in 1988 that did not recur in 1989 accounted for the decrease in dividends paid by both foreign– and Canadian–controlled companies.

Comparative Performance: Petroleum and Other Industries

Net Income

- According to Statistics Canada data, the petroleum industry's net income from Canadian operations – exclusive of Crown corporation results – decreased 39% to $1.7 billion in 1989, compared with a 13% decrease to $21.2 billion for all other non-financial industries. The petroleum industry's net income for 1989 represented 7% of all non-financial industries' net income.

Capital Expenditures

- The petroleum industry's capital expenditures in Canada decreased 11% in 1989 over 1988. Capital expenditures of non-financial industries excluding petroleum increased 10% with the result that the petroleum industry represented 19% of total non-financial industries' capital expenditures compared with 22% in 1988.

Ownership and Control Trends

Canadian ownership of the petroleum industry, based on upstream revenues, increased from 42.1% in 1988 to 43.5% in 1989, and Canadian control rose from 37.6% to 39.1% in 1989. The changes were mainly due to takeover activity and the purchase of producing assets by Canadian-controlled companies in 1989. Canadian ownership of upstream plus downstream revenues rose 0.6 of a percentage point to 44.9% in 1989, while Canadian control increased 1.1 percentage points to 36.1%.

Research and Development Activities

The petroleum industry spent $295 million on Research and Development (R&D) activities in 1989, up 3% from 1988. 'In-house' R&D expenditures were unchanged at $185 million in 1989 over 1988. Contract work performed by others totalled $110 million, up 11% from 1988.

Ten-Year Operating Summary: 1980 - 1989

Noteworthy trends:

- *Revenues* rose steadily after the 1979 oil shock to a peak of $66 billion in 1985. The decline in crude oil prices commencing in January 1986 brought overall industry revenues down by 25% in 1989 from the 1985 high.

- *Internal cash flow* ranged from a low of $7.4 billion in 1982 to a high of $11.6 billion in 1985 and stood at $8.9 billion in 1989.

- *Capital expenditures* grew between 1980 and 1985 to reach an all time high of $12.1 billion. They subsequently dropped during the period of 1986 through 1989.

- *Dividend payments* rose from $1 billion in 1980 to reach a ten-year peak of $2.6 billion in 1986 and declined in 1989 to $1.4 billion.

1

Financial Performance

Total Operations: Net Income and Cash Flow

Petroleum industry revenues rose 7% to $50.2 billion in 1989 over 1988. Crude oil prices exceeded 1988 levels and higher sales volumes of marketable natural gas increased upstream revenues. In addition, greater demand for oil products together with the flow through to consumers of higher feedstock costs caused downstream revenues to rise.

Net income from total operations declined 39% ($860 million) to $1.3 billion in 1989 vs. 1988. Upstream profits fell 21% ($165 million) to $625 million in 1989 due to an extraordinary loss resulting from a provision for impairment of non-producing oil and gas properties being recorded against earnings. Downstream profits fell 38% ($555 million) to $925 million as a result of a decline of 35% ($320 million) in the net income of the oil products segment, and a fall of 41% ($235 million) in the petrochemical segment's net income (Appendix B9). Net earnings of other Canadian operations fell from a profit of $125 million to a loss of $345 million in 1989 mainly due to higher interest expenses of $370 million. However, these declines were partly offset by an improvement in foreign operations. Profits of foreign operations increased from a loss of $210 million in 1988 to a profit of $120 million in 1989.

Internal cash flow from all business segments, unaffected by extraordinary write-offs, decreased $90 million (1%) to $8.9 billion.

Higher overall revenues and lower current income taxes (down 20%) were more than offset by higher operating costs (up 7%), interest charges (up 23%), feedstock costs (up 10%) and federal sales and excise taxes (up 10%) in 1989.

Table 1.
Overview of Total Operations in billions of dollars[a]

	1988	1989	Change	Change %
Total Revenues	**47.0**	**50.2**	**3.2**	**7**
less:				
Operating Costs	11.1	11.9	0.8	7
Interest Expenses	2.1	2.5	0.4	23
Non-income Taxes and Royalties	6.9	7.4	0.5	8
Other Cash Expenses	17.2	18.7	1.5	9
Current Income Taxes				
Federal[b]	0.8	0.7	- 0.1	- 17
Provincial	–	–	–	–
Internal Cash Flow	**9.0**	**8.9**	**- 0.1**	**- 1**
less:				
Write-offs[c]	6.7	6.8	0.1	1
Deferred Taxes	0.2	0.5	0.3	102
Net Income before Unusual Items	2.0	1.6	- 0.4	- 20
Extraordinary Items	0.2	- 0.3	- 0.5	–
Net Income	**2.2**	**1.3**	**- 0.9**	**- 39**

Notes:
(a) Figures may not add due to rounding. See Appendix B1 for detail by operating segment.
(b) Federal Income Tax includes Large Corporations Tax.
(c) The components of 'write-offs' are non-cash charges and exploration and development expenditures charged to current operations.

Net Income by Sector

Net income for the petroleum industry decreased 39% ($860 million) to $1.3 billion in 1989 over 1988. While net income for Canadian-controlled companies dropped by 54% ($540 million) to $460 million, that for foreign-controlled companies fell 27% ($315 million) to $860 million.

Canadian-controlled companies reported profit declines for upstream, downstream and 'other Canadian' operations which more than offset net income increases for foreign activities. The increase in overall revenues of 8% together with reduced non-cash charges offset higher federal sales and excise taxes, increased feedstock costs (cost of goods sold) and interest charges. As a result, net income before extraordinary items declined 2% to $675 million in 1989. However, an extraordinary gain of $310 million from the sale of assets in 1988 vs. an extraordinary loss of $215 million due to the write-off of oil and gas properties in 1989 resulted in an overall decline of 54% in net income after extraordinary items. Cash flow, unaffected by extraordinary items, for this sector remained unchanged at $3.6 billion in 1989 (Appendix B6).

Net income for *foreign-controlled companies* fell in 1989 over 1988. Lower net income was recorded for downstream and 'other Canadian' operations, while net income was higher for upstream operations and foreign activities. The impact of a 6% increase in overall revenues and lower current taxes were offset by increases in operating costs, interest charges, sales and excise taxes and deferred taxes. Cash flow declined 2% to $5.3 billion in 1989 over 1988 (Appendix B7).

Table 2.
Net Income by Sector and Segment in billions of dollars

	1988	1989	Change	%
Canadian-Controlled Companies				
Upstream	0.6	0.2	-0.4	-65
Downstream	0.5	0.3	-0.2	-43
Other[(a)]	-0.2	-0.1	0.1	-
Total Canadian-Controlled	**1.0**	**0.5**	**-0.5**	**-54**
Foreign-Controlled Companies				
Upstream	0.1	0.4	0.3	182
Downstream	1.0	0.6	-0.4	-34
Other[(a)]	0.1	-0.2	-0.3	-
Total Foreign-Controlled	**1.2**	**0.9**	**-0.3**	**-27**
Total Industry	**2.2**	**1.3**	**-0.9**	**-39**

Note:
(a) Comprises net income generated by foreign activities and other Canadian operations. For more detail see Appendices A12, B6 and B7.

Rates of Return

Return on Equity

The rate of return on average shareholders' equity for the total Canadian petroleum industry was 3.3% in 1989 against 5.5% in 1988. The negative effects of higher operating costs, interest expenses, federal sales and excise taxes and cost of goods sold caused a decrease in profitability. In addition, net income was reduced as a result of an extraordinary loss of $275 million in 1989 against an extraordinary gain of $170 million in 1988.

Canadian-controlled companies had a 2.5% return on equity while their foreign-controlled counterparts had a 4% return. The industry's average rate of return on equity for the five-year period ending in 1989 decreased to 3.7% from an average of 4.9% for the period ending in 1988 (Appendix A13).

Return On Capital Employed

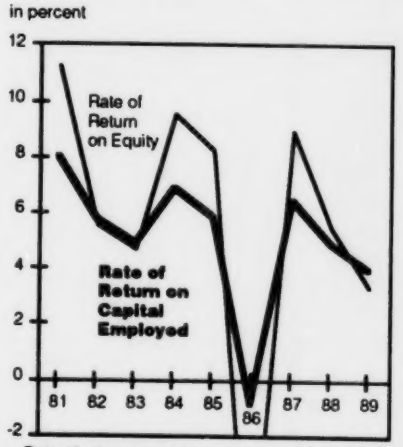
The return on average capital employed by the Canadian petroleum industry in 1989 declined to 3.9% from 4.8% in 1988. The return on capital employed averaged 4% for the five-year period ending in 1989 vs. 4.6% at the end of 1988.

Upstream return on capital employed declined to 3% from 3.6% in 1988, while the downstream return dropped to 5.9% in 1989 from 7.9% in 1988.

Foreign-controlled companies obtained a 4.2% return on capital employed for total operations in 1989, down from 4.9% in 1988. However, the upstream segment of this sector saw its return on capital employed rise from 2.9% to 3.3% in 1989.

The *Canadian-controlled* sector's rate of return on capital employed was 3.6% in 1989, down from 4.7% in 1988. The rate of return on upstream capital employed was 2.7% vs. 4.6% in 1988.

Chart 1.
Rates of Return: Petroleum Industry



Rate of return on equity extends to -7.5 for 1986.

Table 3.
Rates of Return by Sector and Segment in percent

	Canadian-Controlled		Foreign-Controlled		Total Industry	
	1988	1989	1988	1989	1988	1989
Return on Equity						
Total Operations	5.2	2.5	5.8	4.0	5.5	3.3
Canadian Operations	6.6	2.4	5.8	3.6	6.2	3.0
Return on Capital Employed						
Total Operations	4.7	3.6	4.9	4.2	4.8	3.9
Canadian Operations	5.6	3.7	5.1	4.0	5.3	3.9
Upstream Operations	4.6	2.7	2.9	3.3	3.6	3.0
Downstream Operations[a]	6.1	4.6	9.3	6.7	7.9	5.9

Note:
(a) Downstream, in this table, represents oil products operations only, i.e. it excludes petrochemical and other downstream operations.

Interest Coverage[1]

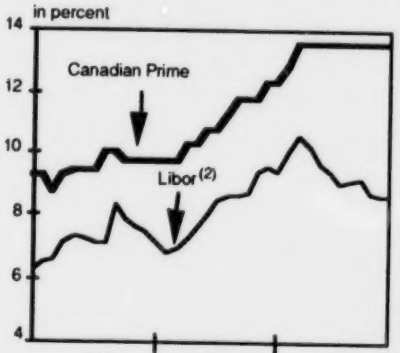
For the industry overall, income before taxes, extraordinary items and expensed interest was 2 times total interest charges, both capitalized and expensed, down from the 2.4 times coverage in 1988. This deterioration in interest coverage was the result of both a decline in industry income and an increase in overall interest charges. The rise in interest charges was due mainly to:

- net new borrowing of $3.1 billion in 1989, and
- higher interest rates affecting about half of all long-term debt, raised at a floating rate.

Net income before taxes and interest for Canadian-controlled companies was $2.1 billion in 1989 – up 22% from the level of $1.7 billion recorded in 1988. Simultaneously, interest charges increased by 28% to $1.1 billion, primarily caused by a $670 million increase in net new long-term debt and higher interest rates. Consequently, the interest coverage for this sector declined to 1.9 times in 1989 from 2 times in 1988.

Foreign-controlled companies' interest coverage moved to 2.1 times in 1989, down from 2.6 times in 1988. The decrease resulted from a 7% decline in income before taxes and interest while interest charges rose 16%. The increase in interest charges was due to a rise of $2.4 billion in net new long-term debt required for takeover activity.

Chart 2.
Interest Rates: Canadian Prime and Libor



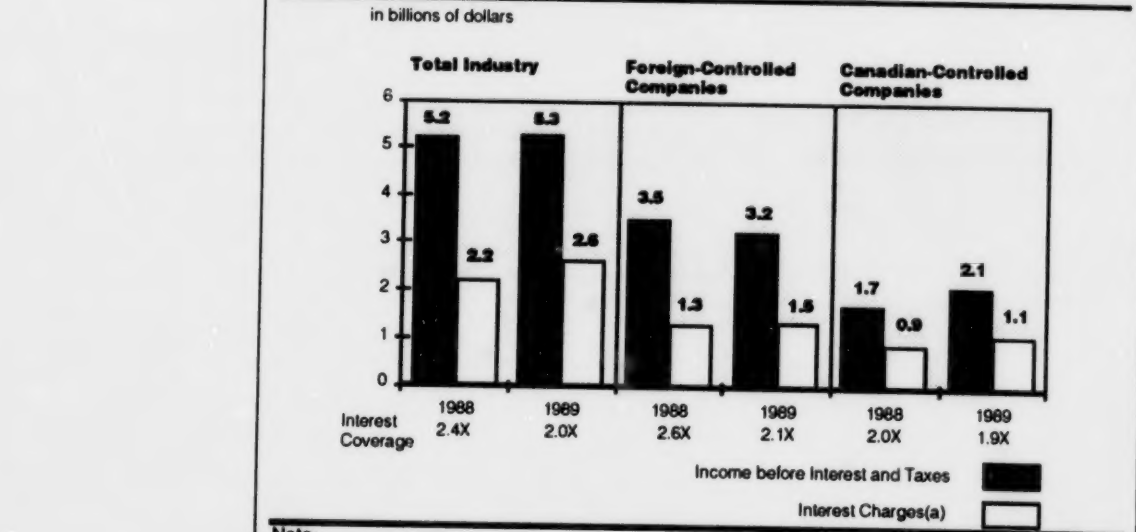
	1987	1988	1989
Avg. Prime	9.5	10.8	13.3
Avg. Libor	7.2	8.1	9.4

Source: Bank of Canada

(1) This analysis of interest coverage relates to total industry activity since there is neither consistency nor uniformity in the way companies allocate interest expenses among the various business segments – upstream, downstream, other Canadian and foreign.

(2) The London Inter-Bank Offered Rate (LIBOR) is defined as the rate at which funds are offered in London to first-class international banks.

Chart 3.
Comparison of Interest Charges with Income before Interest and Taxes



Note:
(a) Interest charges shown include both expensed and capitalized amounts. See Appendix A19 for more detail.

Net Income by Company Group

Integrateds and Refiners

A total of 16 companies grouped in the category 'integrateds and refiners' make up almost the entirety of the downstream segment in terms of revenues, and account for 34% of upstream operations. Net income for the group decreased 32% or $530 million to $1.1 billion in 1989 over 1988. Higher net income from upstream operations and foreign activities was more than offset by lower profits in downstream and 'other Canadian' operations (Appendix B2). In 1989, integrated companies in this sector, having both upstream and downstream operations, raised a considerable amount of debt for takeover purposes and for the redemption of preferred shares. The associated interest charges were allocated to 'other Canadian' operations resulting in a net loss in this industry segment. Had the interest charges been distributed more evenly by industry segment, and not as a corporate expense, net income for both upstream and downstream operations would have been lower in 1989. In addition, debt was also raised by other companies, solely downstream operators, for purposes of expanding and restructuring. The associated interest payments were allocated to the downstream activity. Overall internal cash flow declined 17% to $3.7 billion in 1989 over 1988.

Oil and Gas Producers

The 104 'oil and gas producers' are active almost exclusively in upstream operations. Net income declined 62% to $200 million in 1989 over 1988. Profit declines were recorded for all industry segments, the single exception being foreign activities.

The decline in the group's net income resulted from an extraordinary loss of $150 million in 1989 vs. an extraordinary gain of $225 million in 1988. In addition, higher unusual transactions, such as losses on the sale of property and deferred interest charges, resulted in an increase of almost $400 million in 'write–offs & amortization' expenses. Net income, prior to extraordinary items, rose 15% to $350 million in 1989. Internal cash flow, unaffected by extraordinary or unusual items, rose 14% to $5.2 billion in 1989 over 1988 (Appendices B3–5).

Table 4.
Net Income by Company Group in billions of dollars

	1988	1989	Change	
				%
Integrateds and Refiners				
Upstream	0.4	0.6	0.2	77
Downstream	1.4	0.9	-0.5	-36
Other[a]	-0.1	-0.4	-0.3	-
Total Integrateds and Refiners	**1.7**	**1.1**	**-0.6**	**-32**
Oil and Gas Producers				
Upstream	0.4	-	-0.4	-99
Downstream	0.1	0.1	-	-53
Other[a]	-	0.1	0.1	-
Total Producers	**0.5**	**0.2**	**-0.3**	**-62**
Total Industry	**2.2**	**1.3**	**-0.9**	**-39**

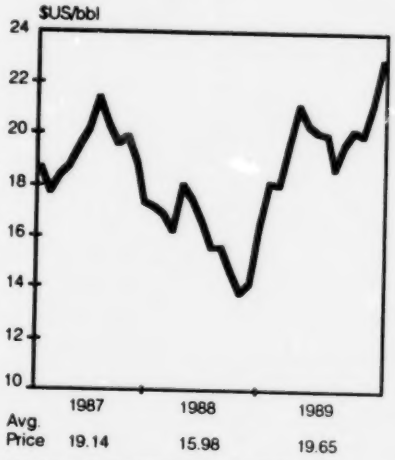
Note:
(a) Comprises net income generated by foreign activities and other Canadian operations. For more detail see Appendices B2 and B5.

Upstream Segment

Revenues from upstream operations rose 9% ($1.4 billion) to $17.2 billion in 1989 (Appendix B1). The impact of lower crude oil production of 3% (Appendix B15) was more than offset by higher realized crude oil prices[1] in 1989 resulting in a revenue increase for crude oil of $1.5 billion. In addition, a 5% rise in the production of marketable natural gas overcame the impact of fractional gas price declines and caused natural gas revenues to increase $210 million. Sulphur revenues declined 29% in 1989; their lowest level in more than a decade due to a reduction in international demand.

The average price received for crude oil (including production from oil sands) during 1989 was 21% higher than in 1988 – $100 per m^3 ($15.80 per bbl) vs. $120 per m^3 ($19.10 per bbl). Crude oil prices received a boost from a combination of unforeseen events such as the Alaska Valdez and the North Sea production accidents, and a record–breaking cold spell in North America during the month of December. Prices for natural gas declined by about one-half of a percent in 1989 to an average of $53.88 per 10^3m^3 ($1.54 per Mcf) over 1988. Average crude oil prices for 1988 and average natural gas prices for 1989 were at their lowest levels in nearly a decade (Appendices A4 and A5).

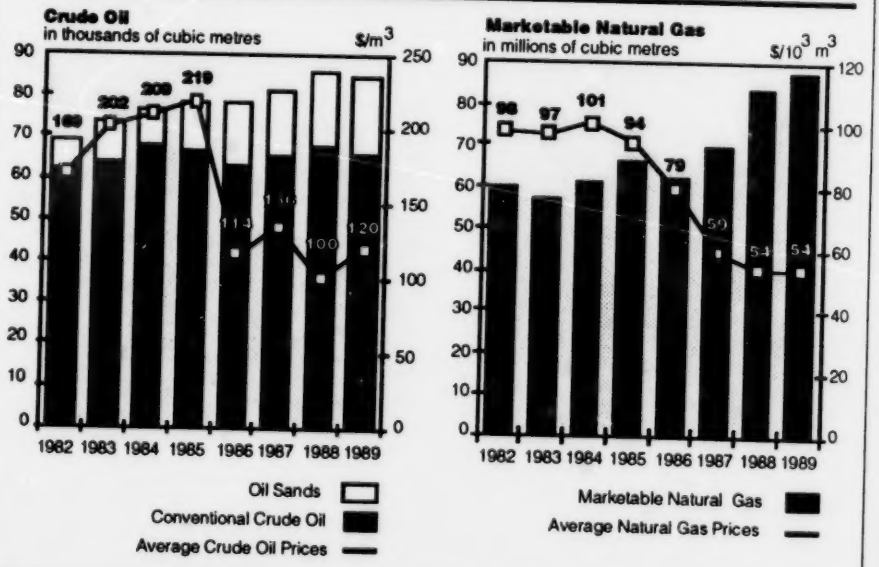
Chart 4.
Crude Oil Prices: West Texas Intermediate (WTI)



Source: International Oil Supply, EMR

(1) Crude oil and natural gas prices realized by Canadian producers are a reflection of the opposing influences of a higher international price and a stronger Canadian dollar relative to the U.S. dollar. International oil prices are generally quoted in U.S. dollars and, as the Canadian dollar strengthens, the Canadian dollar value of oil prices declines. However, the increase in the international oil price (Chart 4) more than offset the rise in the Canadian dollar (Chart 6).

Chart 5.
Oil and Gas Production and Prices: 1982 – 1989



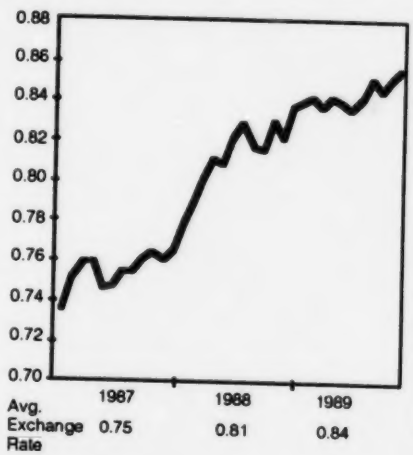
Upstream net income fell 21% (or $165 million) to $625 million in 1989 over 1988. The reduction in net income was brought about by a combination of an extraordinary write-off of $180 million due to a provision for impairment being recorded against earnings in 1989 and an extraordinary gain of $230 million on the sale of assets in 1988.

Upstream net income prior to extraordinary items rose 44% (or $245 million) to $800 million in 1989. An increase in revenues together with reduced interest charges (down 9%), and unchanged non-cash charges more than offset higher current and deferred taxes, royalty payments and operating costs (Appendix B1). Lower interest charges resulted from repayment of long-term debt following the sale of assets by a number of companies in an effort to reduce debt and to rationalize production. Unit operating costs increased from $32 per m^3 in 1988 to $34 per m^3 in 1989 as larger volumes of crude oil were produced from the higher cost oil sands operations (up 2%) while production of conventional crude oil declined 4%. Internal cash flow for the upstream segment rose 11% or $635 million to $6.4 billion in 1989 (Appendices B1–8).

Canadian-controlled companies reported a decrease of $420 million (65%) to $225 million in upstream net income. However, net income prior to extraordinary items rose 59% to $415 million. The net income rise resulted from higher revenues coupled with reduced non-cash charges which more than outweighed higher interest charges, operating costs, and current and deferred income taxes. Cash flow rose 10% (or $220 million) to $2.5 billion in 1989 compared with 1988 (Appendix B6).

Foreign-controlled companies' upstream profits nearly tripled to $395 million. However, prior to extraordinary items, net income rose 31% (or $90 million) to $390 million in 1989 due to higher revenues and lower interest charges which more than offset higher income taxes (both current and deferred), and increased operating costs. Cash flow increased by 12% to $3.9 billion in 1989 over 1988 (Appendix B7).

Chart 6.
Exchange Rates: Canadian vs. U.S. Dollar



Source: Bank of Canada

Table 5.
Upstream Financial Performance in billions of dollars

	1988	1989	Change	Change %
Total Revenues	**15.8**	**17.2**	**1.4**	**9**
less:				
Operating Costs	5.9	6.3	0.4	7
Interest	1.4	1.3	-0.1	-9
Royalties, Taxes	2.5	2.7	0.2	7
Other Expenses	5.3	5.3	–	1
Income Before Taxes	**0.7**	**1.8**	**0.9**	**139**
Current Taxes	–	0.4	0.4	–
Deferred Taxes	0.1	0.4	0.3	360
Net Income before Unusual Items	0.6	0.8	0.2	44
Extraordinary Items	0.2	-0.2	-0.4	–
Net Income	**0.8**	**0.6**	**-0.2**	**-21**

Downstream Segment

Oil Products Operations

Revenues from refining and marketing of oil products increased 9% to $24.8 billion in 1989 mainly as a result of a 4% increase in sales volumes. In addition, increased revenues resulted from the flow through to consumers of higher federal sales and excise taxes[1] of 10% and feedstock costs (cost of goods sold) of 11%.

Net income fell 35% ($320 million) to $585 million in 1989 over 1988. Increased expenses in almost all categories outweighed higher revenues to reduce profits. Of particular importance were interest charges which rose from $55 million in 1988 to $220 million in 1989 as a result of increased borrowing following corporate changes to a number of companies.

Cash flow for oil products operations decreased 15% or $235 million to $1.3 billion in 1989 over 1988 (Appendix B9).

Gross profit margins, defined here as the difference between average sales revenue, direct taxes and cost of goods sold, remained unchanged at 6.4¢ per litre in 1989 over 1988 (Appendices A8 and A22).

Average crude oil refiner acquisition cost by region and related transportation costs are shown in Appendices A6–7.

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(1) On April 28, 1989, the excise tax on gasoline was increased by 1 cent per litre. An additional 1 cent per litre surcharge was placed on leaded gasoline.

Table 6.
Oil Products: Financial Performance and Profit Margins

	1988		1989		Change
	$ millions	¢/litre	$ millions	¢/litre	¢/litre
Gross Sales	22701	26.56	24814	27.94	1.38
Other Revenue	698	0.82	772	0.87	0.05
Total Revenues	**23400**	**27.38**	**25587**	**28.81**	**1.43**
less:					
Federal Sales and Excise Taxes	4250	4.97	4667	5.26	0.28
Cost of Goods Sold	13647	15.97	15192	17.11	1.14
Gross Profit Margins	**5502**	**6.44**	**5728**	**6.45**	**0.01**
less:					
Distribution, Selling and Administration Expenses	3406	3.98	3747	4.22	0.23
Cash Income before Interest and Current Taxes	**2097**	**2.45**	**1981**	**2.23**	**– 0.22**
Interest Expenses	56	0.07	220	0.25	0.18
Current Income Taxes	496	0.58	450	0.51	– 0.07
Cash Income after Current Taxes	**1545**	**1.81**	**1312**	**1.48**	**– 0.33**
Depreciation and Other Non-Cash Charges	583	0.68	640	0.72	0.04
Deferred Income Taxes	87	0.10	19	0.02	– 0.08
Extraordinary Items	29	0.03	– 69	– 0.08	– 0.11
Net Income after Extraordinary Items	**903**	**1.06**	**584**	**0.66**	**– 0.40**

Other Downstream Operations

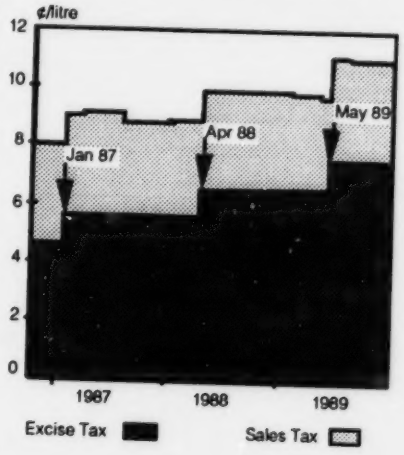
Net income from other downstream operations, mainly petrochemicals, declined 41% (or $235 million) to $340 million in 1989 over 1988. Reduced demand for petrochemicals was reflected in lower revenues which together with higher operating costs and interest expenses caused a decline in profits and cash flow. Internal cash flow fell 26% to $590 million (Appendix B9).

Total Downstream

The combined revenue of petroleum products and petrochemical operations increased 7% to $28.8 billion. Combined net income declined 38% to $925 million in 1989 from $1.5 billion in 1988 and cash flow decreased 19% ($445 million) to $1.9 billion.

Chart 7.

Federal Sales and Excise Taxes(1) on Regular Unleaded Gasoline



Other Canadian Operations

This business segment, which includes corporate income and expenses, recorded a net loss of $345 million in 1989 compared with a profit of $125 million in 1988. In 1989, sizeable corporate eliminations occurred in current income taxes and were reported as negative current taxes. This in itself would have increased the reported amount of net income. However, lower revenues and a marked increase of $370 million in interest charges (reported as a corporate item) resulted in the net loss in 1989. Cash flow, similarly affected, was a negative $50 million in 1989 vs. a positive $380 million in 1988.

As noted in previous Monitoring Reports, many companies treat financing activities, and thus interest expense, as a corporate function – by definition included in 'other Canadian' operations. Although a large number of companies allocate interest charges to other segments, 36% of the industry's total interest expenses remain charged to this segment which accounts for only 5% of total industry revenues.

Foreign Operations

Net income on foreign operations rose from a loss of $210 million in 1988 to a gain of $120 million in 1989. A 5% increase in revenues together with a 19% decrease in non-cash items resulted in improved profitability. Foreign activities of Canadian petroleum companies tend to be oil and gas production operations. Accordingly, the rise in revenues reflected the same factors that applied generally to Canadian upstream operations. Cash flow rose 33% to $620 million (Appendix B1).

(1) Federal taxes on gasoline are made up of a sales tax, based on an ad valorem rate, and an excise tax which is not tied to the price of the product.

Table 7.

Downstream Financial Performance by Subsegment in millions of dollars

	Net Income			Cash Flow		
	1988	1989	Change %	1988	1989	Change %
Oil Products	903	584	– 35	1545	1312	– 15
Petrochemicals	576	340	– 41	802	590	– 26
Total Downstream	1479	924	– 38	2347	1902	– 19

2

Sources and Uses of Funds[1]

Overview

Funds available to the petroleum industry prior to 'discretionary uses' increased $4.5 billion or 47% to $14 billion in 1989 resulting from a rise of $4.6 billion in net external sources, which more than offset a decrease in internal cash flow of $90 million. Net external sources provided $5.1 billion in 1989 vs. $500 million in 1988.

New long-term debt exceeded redemptions by $3.1 billion compared with $430 million of net redemptions in 1988. New equity, net of repurchases, was $2 billion in 1989 vs. $940 million in 1988. The increase in both new long–term debt and equity can be largely viewed as funds raised for the purpose of takeover activity in the petroleum industry.

During 1989, net capital outlays were 14% lower at $7.5 billion. Dividend payments fell 44% from $2.5 billion to $1.4 billion. The excess of 'All Other Uses' over 'All Other Sources' in 1989 resulted from the purchase of assets and takeover activity.

The net draw-down of working capital of $3.3 billion in 1988 contrasted with the smaller draw–down of $130 million in 1989. The 1988 draw-down of working capital was in part due to short-term borrowing by a large Canadian–controlled company to finance the redemption of preferred shares. In addition, dividends declared (but not paid in 1988) and long–term debt becoming due for a number of companies entering receivership led to an increase in short-term liabilities, and hence a reduction in working capital (Appendix B10).

(1) Sources and uses of funds for an individual company are reported to the PMA on a net basis. For example, a company raising and repaying debt would report only the net amount. Similarly, companies report only the net amount with regard to changes in equity and in working capital. For the industry as a whole, the PMA continues this process of netting the aggregates to show the industry's net draw of funds from, or net contribution of funds to, other sectors of the economy. However, to allow the reader to distinguish at the aggregate level between new long-term debt and repayment of debt, etc., these aggregates are shown separately in Table 9.

Table 8.
Sources and Uses of Funds (Net) in billions of dollars

	1988	1989	Change	
				%
Internal Sources				
Net Income before Unusual Items	2.0	1.6	- 0.4	- 21
Non-cash Items	6.9	7.3	0.4	5
Internal Cash Flow	**9.0**	**8.9**	**- 0.1**	**- 1**
Net External Sources				
New Long-term Debt, Net of Repayments	- 0.4	3.1	3.5	-
New Equity, Net of Repurchases	0.9	2.0	1.1	110
Net External Sources	**0.5**	**5.1**	**4.6**	**-**
Net Sources	**9.5**	**14.0**	**4.5**	**47**
Discretionary Uses				
Net Capital Expenditures	8.7	7.5	- 1.2	- 14
Dividend Payments	2.5	1.4	- 1.1	- 44
All Other Uses, Net of Other Sources	1.7	5.2	3.5	212
Net Uses	**12.8**	**14.1**	**1.3**	**10**
Net Working Capital Change	**- 3.3**	**- 0.1**	**3.2**	**-**

Sources and Uses of Funds (Gross)

External sources of funds were much higher in value in 1989 than in 1988. New long-term debt was $5.2 billion, up $2.9 billion, and repayment of debt declined 22% or $580 million to $2.1 billion. New share issues rose $480 million to $2.8 billion, while equity reductions declined to $860 million in 1989. The increase in new long–term debt and equity was largely due to takeover activity.

Reported individual increases of working capital totalled $1.5 billion in 1989, up $35 million from the 1988 total. Individually reported decreases in working capital amounted to $1.6 billion in 1989 compared to $4.8 billion in 1988.

Funds reported as 'all other sources' represent, in part, proceeds from the sale of oil and gas properties. 'All other sources' was $4.2 billion in 1989 compared with $4.5 billion in 1988. 'All other uses' of funds rose from $6.2 billion in 1988 to $9.4 billion in 1989 largely as a result of increased funds used for takeover activity, reflecting the purchase of the entire corporate entities as well as parcels of assets. However, funds used for the purchase of assets decreased to $1.4 billion from $2.1 billion in 1988. Companies indicated that in 1988 they sold assets to reduce debt, while in 1989 assets were sold in an effort to rationalize operations.

Net capital expenditures decreased 14% ($1.2 billion) to $7.5 billion in 1989 over 1988 (for further detail see Table 13).

Table 9.
Selected Categories of Sources and Uses of Funds in billions of dollars[a]

	1988	1989	Change	
				%
New Long-term Debt[b]	2.3	5.2	2.9	130
Repayment of Long-term Debt[d]	2.7	2.1	-0.6	-22
Long-term Debt, Net of Repayments	**-0.4**	**3.1**	**3.5**	**-**
New Equity[b]	2.4	2.8	0.4	20
Repurchase of Equity[d]	1.4	0.9	-0.5	-39
Net Equity, Net of Repurchases	**0.9**	**2.0**	**1.1**	**110**
Working Capital Increase[d]	1.5	1.5	-	2
Working Capital Decrease[b]	4.8	1.6	-3.2	-66
Net Working Capital Change	**-3.3**	**-0.1**	**3.2**	**-**
All Other Sources[c]	4.5	4.2	-0.3	-6
All Other Uses[e]	6.2	9.4	3.2	53
Other Uses Net of Other Sources	**1.7**	**5.2**	**3.5**	**212**
Total Capital Outlays	9.1	7.7	-1.4	-16
CEDIP, CEIP and Other Incentives	0.4	0.2	-0.2	-53
Net Capital Expenditures	**8.7**	**7.5**	**-1.2**	**-14**

Notes:
(a) Appendix B10 shows more detail.
(b) Represents amounts of new long-term debt, new equity, or funds from drawing down working capital by those companies that reported deriving net funds from these sources.
(c) Includes unusual gains; unusual losses are included in 'All Other Uses'.
(d) Represents the net application of funds to repay long-term debt, repurchase equity, or to build up working capital by those companies that reported using funds for these purposes.
(e) Mainly funds for acquisitions of plant and property from other corporations and for corporate takeovers.

Internal Cash Flow

Petroleum industry internal cash flow decreased $90 million (1%) to $8.9 billion in 1989. Higher crude oil prices and natural gas sales volumes, and lower current income taxes were more than offset by the impact of higher sales and excise taxes, and increased interest and operating costs (including general and administrative expenses). The upstream segment recorded an increase of 11% ($635 million) to $6.4 billion. Cash flow from downstream operations dropped 19% ($445 million) to $1.9 billion due to higher interest charges and 'cost of goods sold' (feedstock costs). Cash flow of 'other Canadian' operations declined from $380 million in 1988 to a negative $50 million in 1989 largely as a result of lower revenues and the allocation of interest charges associated with takeover activity to this business segment. Internal cash flow from foreign activities rose 33% to $620 million in 1989 due to higher crude oil prices and lower cost of goods sold.

Canadian-controlled companies' internal cash flow remained unchanged at $3.6 billion in 1989. Strong upstream and foreign operations' results offset the poorer performance of downstream and 'other Canadian' operations.

Foreign-controlled firms' cash flow was down 2% to $5.3 billion, with higher cash flow in upstream operations and foreign activities more than offset by reductions in downstream and 'other Canadian' operations.

Table 10.
Internal Cash Flow by Sector and Segment in billions of dollars[a]

	1988	1989	Change	Change %
Canadian-Controlled Companies				
Upstream	2.3	2.5	0.2	10
Downstream	0.9	0.7	-0.2	-23
Other[b]	0.4	0.4	-	-4
Total Canadian-Controlled	**3.6**	**3.6**	**-**	**-**
Foreign-Controlled Companies				
Upstream	3.5	3.9	0.4	12
Downstream	1.5	1.2	-0.3	-17
Other[b]	0.2	-0.1	-0.3	-
Total Foreign-Controlled	**5.4**	**5.3**	**-0.1**	**-2**
Total Industry				
Upstream	5.8	6.4	0.6	11
Downstream	2.3	1.9	-0.4	-19
Other[b]	0.8	0.6	-0.2	-33
Grand Total	**9.0**	**8.9**	**-0.1**	**-1**

Notes:
(a) See Appendices B1, B6 and B7 for more detail.
(b) Comprises internal cash flow generated by foreign activities and other Canadian operations.

Incentive Grants and Tax Credits

On March 25, 1987, the Government of Canada announced the establishment of the Canadian Exploration and Development Incentive Program (CEDIP) to provide direct assistance to the industry in respect of capital expenditures in the upstream segment. The level at which grants were earned was reduced in October 1988 to 25% from 33 1/3% of eligible capital expenditures. On April 27, 1989, the program was terminated subject to grandfathering provisions.

On October 1, 1988, the Canadian Exploration Incentive Program (CEIP) was in place. The program provided for grants of 30% of eligible exploration expenses when incurred under a flow-through share agreement. It was terminated on February 20, 1990.

Some Petroleum Incentives Program (PIP) grants continued to be available in 1987 and 1988 as commitments made under agreements existing at the time of the March 31, 1986 termination were exempted.

Total grants declined from $265 million in 1988 (partly PIP grants) to $140 million (mainly CEDIP and CEIP grants) during 1989. Canadian-controlled companies received 53% of the grants in 1989, compared with 56% of the total in 1988.

Table 11.
Incentive Grants by Area and Sector in millions of dollars

	Canadian-Controlled		Foreign-Controlled		Total	
	1988	1989	1988	1989	1988	1989
Provinces	142	73	118	65	260	137
Canada Lands	6	1	–	1	6	2
Total Canada	148	74	119	65	266	139

Note:
Appendix A17 provides additional detail.

Exploration expenses for wells costing more than $5 million qualify for the Exploration Tax Credit (ETC) at a rate of 25% of eligible expenses. These credits together with the Investment Tax Credit (ITC) declined to $55 million in 1989 from $115 million in 1988. Decreases stemmed from lower credits for both the provinces and the Canada Lands. The amount of ITC earned has been reduced over the past years and will be phased out completely except if an expenditure occurs in a designated area or for certain scientific research and development activity.

Table 12.
Exploration and Investment Tax Credits in millions of dollars

	Canadian-Controlled		Foreign-Controlled		Total	
	1988	1989	1988	1989	1988	1989
Provinces	24	2	34	3	58	5
Canada Lands	36	18	20	33	56	51
Total Canada	59	20	54	35	113	55

Capital Expenditures

Gross capital expenditures in 1989 decreased $1.4 billion or 16% to $7.7 billion, with domestic expenditures declining 16% and outlays abroad dropping 13%. Expenditures abroad, as a share of total capital spending, remained unchanged at 7% in 1989. Upstream expenditures remained the largest component of total capital outlays, accounting for 70% in 1989 vs. 74% in 1988. All components of the upstream sector recorded decreases with the exception of production expenditures. Downstream expenditures declined 4% while the small component of non–specified expenditures rose 21%.

Table 13.
Capital Expenditures in billions of dollars[a]

	1988	1989	Change		Share of Total 1988	Share of Total 1989
				%	%	%
Upstream						
Exploration	3.0	2.4	-0.6	-18	33	32
Development	1.3	0.8	-0.5	-39	14	10
Production	1.7	1.9	0.2	13	18	24
Non-conventional[b]	0.8	0.3	-0.5	-64	9	4
Total Upstream[c]	**6.8**	**5.4**	**-1.4**	**-20**	**74**	**70**
Downstream	1.3	1.3	-	-4	15	17
Energy Mining	0.1	0.1	-	-24	1	1
All Other	0.3	0.4	0.1	32	4	6
Total Expenditures in Canada	**8.5**	**7.2**	**-1.3**	**-16**	**93**	**93**
Expenditures Abroad	**0.6**	**0.5**	**-0.1**	**-13**	**7**	**7**
Total Expenditures	**9.1**	**7.7**	**-1.4**	**-16**	**100**	**100**
Incentive grants and other receipts	0.4	0.2	-0.2	-50		
Net Capital Expenditures	**8.7**	**7.5**	**-1.2**	**-14**		
Memo Items: Upstream Capital Expenditures (Net of incentive grants and other receipts)	6.4	5.2	-1.2	-18		

Notes:
(a) More detail is presented in Appendices B11 and B12.
(b) Includes oil sands and non-conventional heavy oil products.
(c) Includes CEDIP and CEIP incentives, and other receipts.

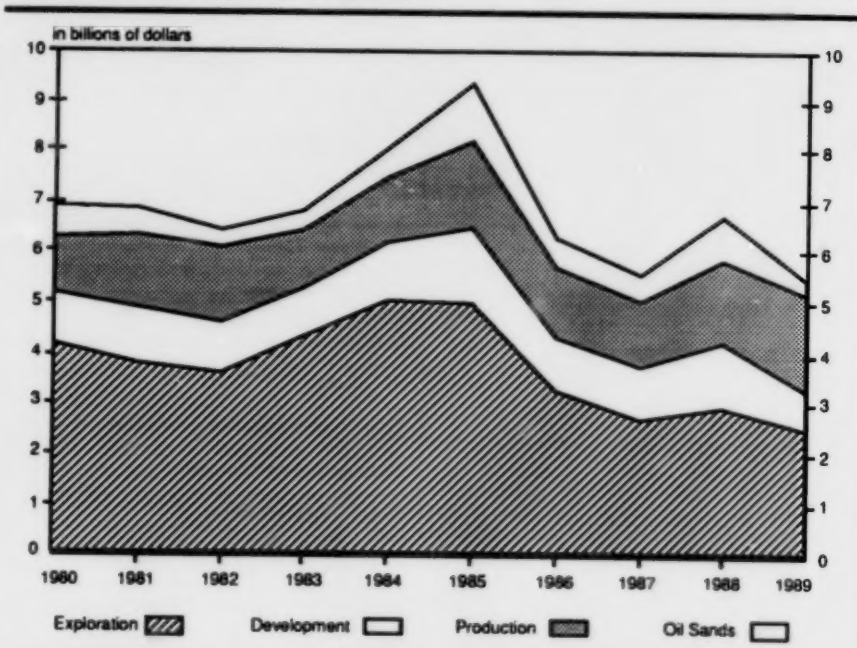
Upstream: Uncertainty over future oil prices following the reduction of crude oil prices in 1988 to the lowest average level in ten years produced a dampening effect on capital outlays in 1989. Even though the number of drilling rigs declined in western Canada, rig utilization dropped to 30% of available rigs in 1989 from 41% in 1988. Companies reduced expenditures in 1989 by $1.4 billion or 20% to $5.4 billion, the lowest level in a decade. Expenditures declined in all categories, with the exception of production spending, which increased. The rise in production expenditures resulted from increased construction of natural gas processing plants to take advantage of a growing natural gas market.

Upstream outlays by Canadian- and foreign-controlled companies declined 20% for each group. As a result, the Canadian-controlled group of companies' share of upstream capital spending remained unchanged at 44% of the total in 1989 (Appendix B11).

Exploration expenditures fell 19% to $2.0 billion in the provinces, and decreased 18% to $410 million on Canada Lands. This produced a decline of 18% in total exploration spending to $2.4 billion. Expenditures on Canada Lands accounted for 17% of the total in both 1988 and 1989.

Exploration outlays by foreign-controlled companies were 12% lower in 1989, while those for Canadian-controlled firms were down by 25%. Canadian-controlled companies accounted for 46% of total exploration spending, down 4 percentage points from 1988.

Chart 8.
Upstream Expenditures in Canada



Downstream Expenditures: Downstream outlays declined 4% to $1.3 billion in 1989. Reductions in expenditures for refineries more than offset increased spending on petrochemical plants and marketing outlets.

Energy Mining and All Other: Expenditures were unchanged in energy mining, but higher in all other areas including those for mining facilities, drilling ships, caissons, and drilling rigs. This category of capital outlays may also include capitalized interest charges.

Reinvestment Rates

The overall reinvestment rate for the petroleum industry, total net capital expenditures[1] as a percentage of internal cash flow from all business segments, was 85% in 1989, down from 96% in 1988 (Appendix A15).

Upstream capital budgets were reduced in 1989 following a decline in the price of crude oil in 1988 to its lowest average level in nearly a decade. This price decline followed on the heels of large crude oil price fluctuations in 1986 and 1987, creating a great deal of uncertainty about the direction of prices in 1989. In addition, new capital outlays were adversely affected as funds were used to purchase producing properties in an effort to rationalize operations and to acquire companies. Accordingly, gross upstream expenditures declined 20%. Capital outlays in high cost areas such as oil sands were affected the most (down 64%). Overall capital expenditures were 16% lower in 1989 vs. 1988.

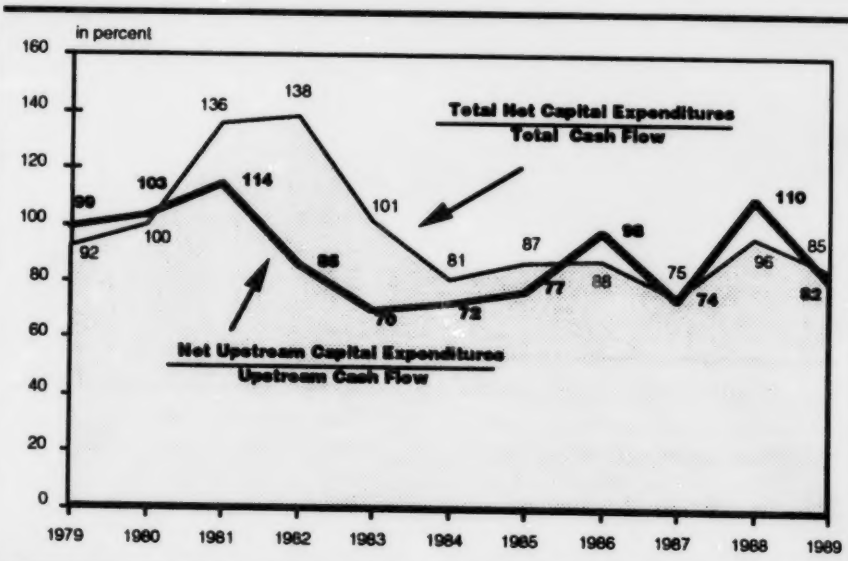
A slightly lower cash flow of 1% together with the reduced capital expenditures caused a decrease of 11 percentage points in the reinvestment rate to 85% in 1989.

Both Canadian- and foreign-controlled groups reported major overall decreases in their reinvestment rates. Canadian-controlled companies' total reinvestment rate declined from 112% in 1988 to 96% in 1989, while that for foreign-controlled companies dropped from 86% to 77%. A comparison of the two groups in terms of upstream activities gives similar results, with Canadian-controlled companies reinvesting 92% of upstream cash flow (down 28 percentage points) vs. 74% for foreign-controlled firms (down 29 percentage points).

Upstream capital expenditures (net of incentive grants) accounted for 82% of industry upstream cash flow, down 28 percentage points from 1988. Upstream cash flow increased 11%, while net upstream capital expenditures fell 18%.

(1) Net capital expenditures is defined as capital expenditures less incentive grants and insurance receipts.

Chart 9.
Reinvestment Rates



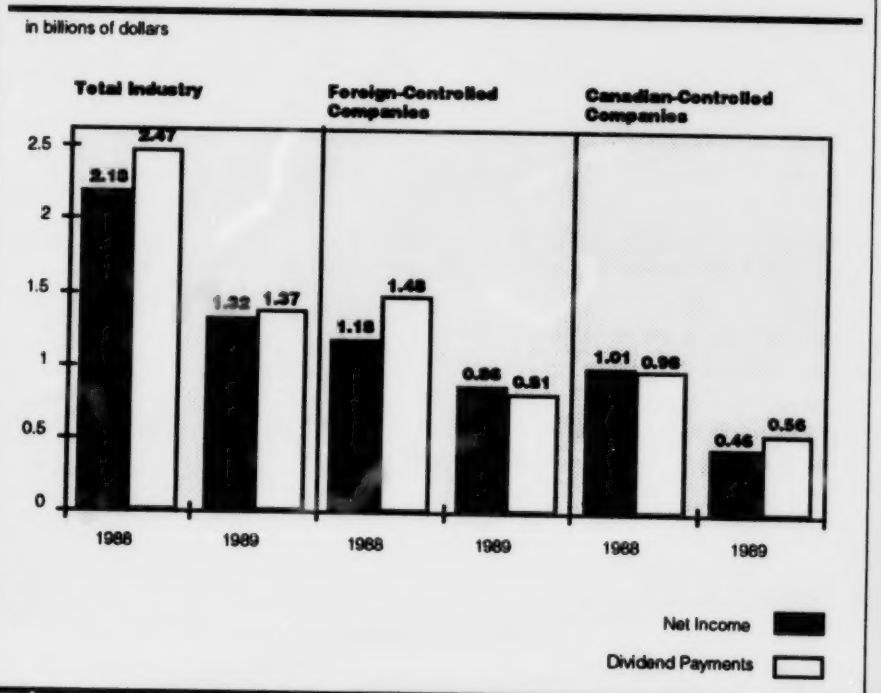
Dividend Payments

Dividend payments by the petroleum industry fell 44% to $1.4 billion in 1989, while net income declined 39% from $2.2 billion in 1988 to $1.3 billion. As a result, the industry payout rate fell from 113% in 1988 to 104% in 1989.

Dividends paid by Canadian-controlled companies decreased 43% to $565 million for a payout rate of 123% in 1989, while dividend payments by foreign-controlled companies fell 46% to $805 million, a payout of 93%.

A declaration of dividends by a foreign-controlled company prior to being purchased by another firm in 1988 was largely responsible for the exceptionally high dividend payment in that year. Also in the same year, a number of Canadian–controlled companies, without a history of paying dividends, declared relatively large payments prior to the occurrence of major changes to their corporate structures. Dividend payments in 1989 were much closer to those paid in years prior to 1988 (Appendices A20 and B18).

Chart 10.
Dividend Payments Compared with Net Income



3

Comparative Performance: Petroleum and Other Industries

Net Income Comparison

The petroleum sector's financial performance can be put into perspective by comparing it to other sectors of the economy using data from Statistics Canada.(1) The purpose is to indicate the relative and changing importance of the petroleum industry in the total net income picture of all non–financial industries.(2)

Exclusive of Crown corporations, the petroleum industry's net income from Canadian operations after extraordinary items decreased 39% to $1.7 billion in 1989, compared with a 13% decrease to $21.2 billion for all other non-financial industries. Chart 11 shows that the petroleum industry's net income for 1989 represented 7% of all non-financial industries' net income -- the lowest level in a decade with the sole exception of 1986 when companies utilizing the full cost accounting method were required to take large write–offs in accordance with CICA guidelines.

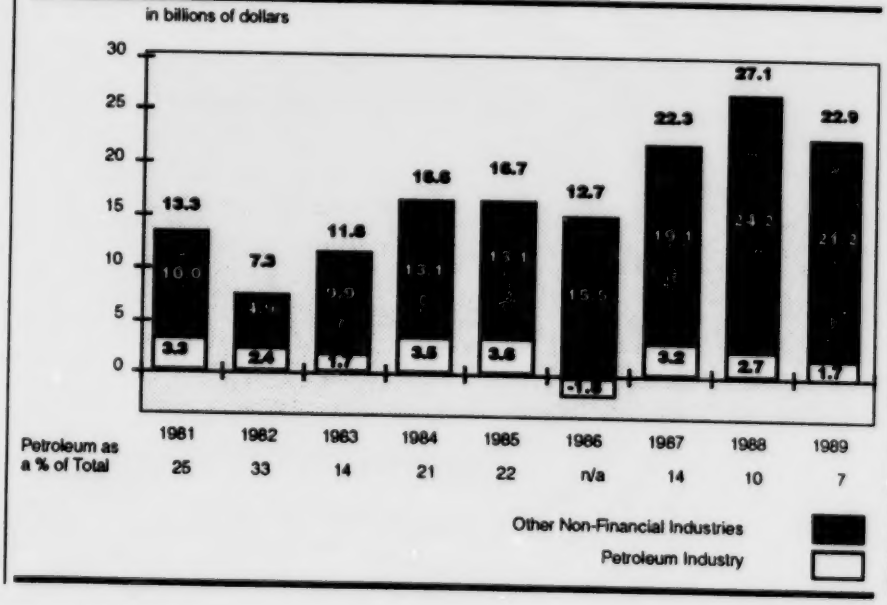
Table 14.
Comparison of Net Income: Petroleum Industry vs. All Other Non-Financial Industries in billions of dollars

	1988	1989	Change	Change %
Total Non-Financial excluding Petroleum	24.4	21.2	- 3.2	- 13
Petroleum	2.7	1.7	- 1.0	- 39
Total Non-Financial including Petroleum	27.1	22.9	- 4.2	- 16

(1) The data given in this section of the report are not precisely comparable with those presented elsewhere although they are close to results based on the PMA survey which are reported in Chapters 1 and 2. Petroleum industry data from Statistics Canada, while covering a greater number of companies than the PMA survey, exclude government business enterprises as well as the foreign activities of companies originating in Canada. The PMA survey covers the global activities of petroleum companies operating in Canada, including Crown corporations, subject to a minimum size in terms of assets and revenues.

(2) Included here are manufacturing, mining, services, utilities, etc.

Chart 11.
Comparison of Net Income – Petroleum Industry vs. All Other Non-Financial Industries



Capital Expenditures

Based on Statistics Canada data, petroleum industry gross capital expenditures (i.e. before deducting incentive grants) decreased 11%(1) in 1989 over 1988 primarily due to the effect of the drop in crude oil prices experienced in 1988 and the resulting uncertainty that was created with respect to future price levels.

Capital expenditures of non-financial industries excluding petroleum increased 10%, largely the result of the increase in spending by manufacturing and mining firms. The capital expenditures of the petroleum industry as a proportion of total capital expenditures of all non-financial industries decreased by 3 percentage points to 19% in 1989.

---

(1) These data differ significantly from those published in Chapter 2 due to the fact that Statistics Canada data include here some acquisitions in the category of capital expenditures.

Table 15.
Comparison of Capital Expenditures: Petroleum Industry vs. All Other Non-Financial Industries in billions of dollars

	1988	1989	Change	%
1. Manufacturing	12.1	15.2	3.0	25
2. Mining	2.9	3.1	0.3	9
3. **Other Non-Financial**	**20.4**	**20.5**	**0.1**	**1**
4. **Total Non-Financial** excluding Petroleum	**35.4**	**38.8**	**3.4**	**10**
5. Petroleum	10.1	9.0	– 1.1	– 11
6. **Total Non-Financial** including Petroleum	**45.5**	**47.8**	**2.3**	**5**
7. Line 5 as a % of line 6	22	19		

Source:
Statistics Canada, 61-003, *Industrial Corporations – Financial Statistics*. This survey does not include government enterprises. Expenditures are gross outlays, including capital grants.

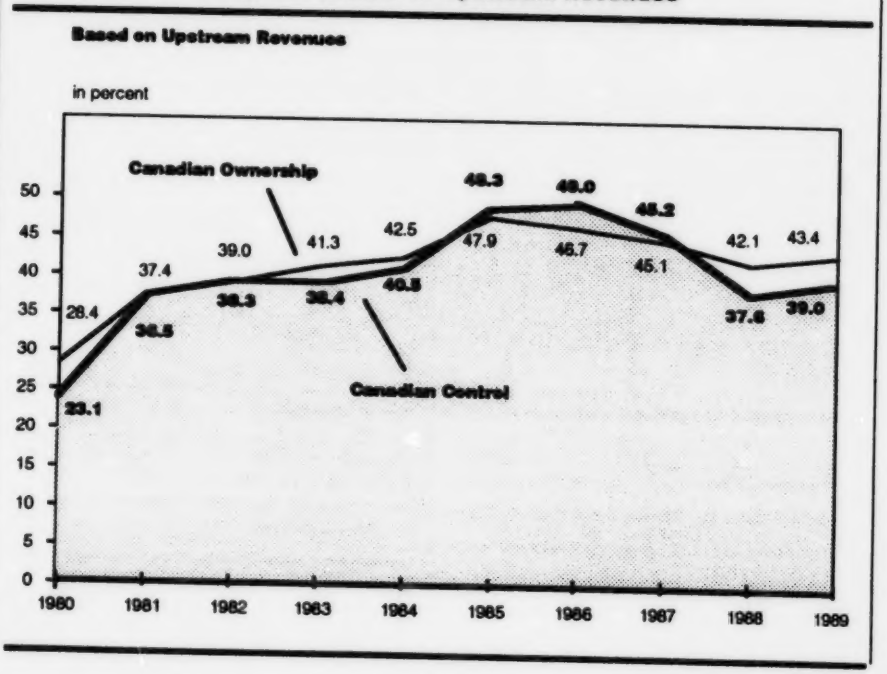
4

Ownership and Control Trends

In 1989, the petroleum industry continued its restructuring through the sale/purchase of assets to rationalize production and bring down operating costs. In addition, assets were sold to pay down long–term debt, and in some cases, to meet commitments made to Investment Canada following takeovers in prior years. These types of transactions together with the takeover of foreign–controlled companies by Canadian–controlled firms resulted in an improvement in the levels of Canadian ownership and control of the petroleum industry. Also, the takeover of a large integrated company by another with a higher Canadian ownership rate, increased the level of Canadian ownership.

Canadian ownership of upstream revenues increased to 43.4% in 1989 from 42.1% in 1988 (up 1.3 percentage points) while Canadian control rose from 37.6% to 39.0% in 1989 (an increase of 1.4 percentage points) — the first such increase since 1986.

Chart 12.
Canadian Ownership and Control of Upstream Revenues



Canadian ownership of upstream plus downstream revenues rose 0.6 of a percentage point to 44.9% in 1989, while Canadian control increased 1.1 percentage points to 36.1%.

The previously noted transactions that affected upstream ownership and control levels had a similar impact on the ownership and control levels of upstream and downstream revenues, albeit a muted impact because upstream revenues represent 37% of the total for upstream plus downstream. In addition, New Grad Energy Inc.'s start-up of production in 1989 caused an increase in Canadian ownership and control of upstream plus downstream revenues.

Chart 13.
Canadian Ownership and Control of Upstream plus Downstream Revenues

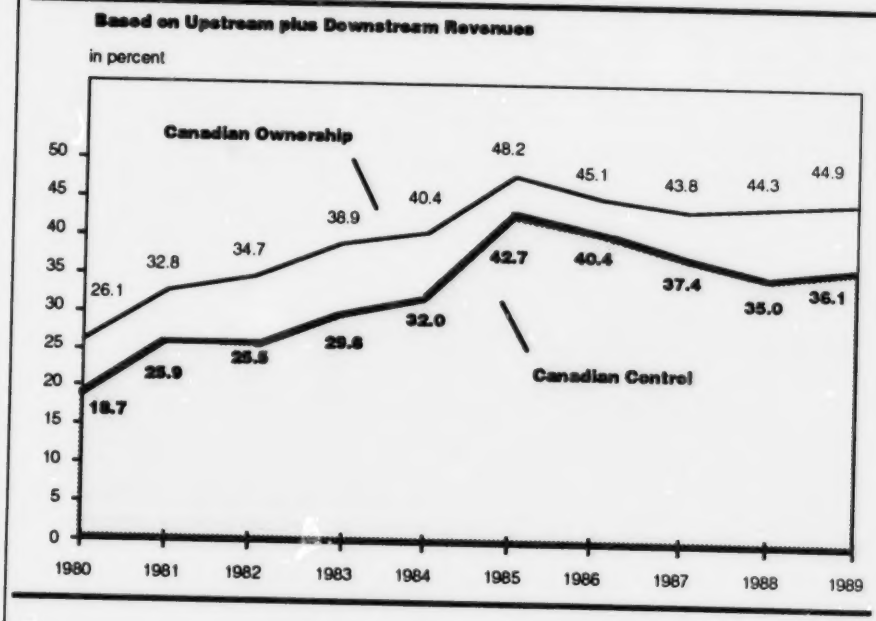


Table 16.
Ownership and Control by Country and Sector in percent[a]

	Ownership		Control	
	1988	1989	1988	1989
United States	39.8	39.2	44.7	44.2
Other Foreign	15.9	15.9	20.3	19.7
Total Foreign	**55.7**	**55.1**	**65.0**	**63.9**
Canadian Public Sector	15.9	16.1	15.9	16.3
Canadian Private Sector	28.4	28.8	19.0	19.8
Total Canadian	**44.3**	**44.9**	**35.0**	**36.1**

Note:
(a) Based on upstream plus downstream ("petroleum-related") revenues.

5

Research and Development Activities: 1989 vs. 1988

A total of 17 PMA companies, mostly larger firms, reported R&D expenditures in 1989, compared to 23 in 1988. In total, these companies spent $294 million on R&D activities in 1989, up 3% from 1988[1]. During 1989, 'in-house' R&D expenditures fell by 1% to $187 million, while contract work performed by others rose by 10% to $107 million.

'In-house' Expenditures

Expenditures of a current nature increased to $154 million or by 7%, of which the wages and salaries component decreased 4% to $66 million. The balance ($33 million) of total 'in–house' expenditures was spent on capital goods, primarily R&D equipment ($15 million) and buildings ($18 million). The capital expenditures component decreased 26% over 1988 levels.

Refinery technology R&D remained the largest single component of 'in-house' R&D expenditures at 34%, increasing in absolute terms by $6 million to $64 million. The second largest component, R&D expenditures related to conventional crude oil and natural gas increased to $59 million (vs. $44 million in 1988), representing 33% of all 'in-house' R&D expenditures in 1989. In-situ recovery of heavy oil decreased by more than half to $23 million.

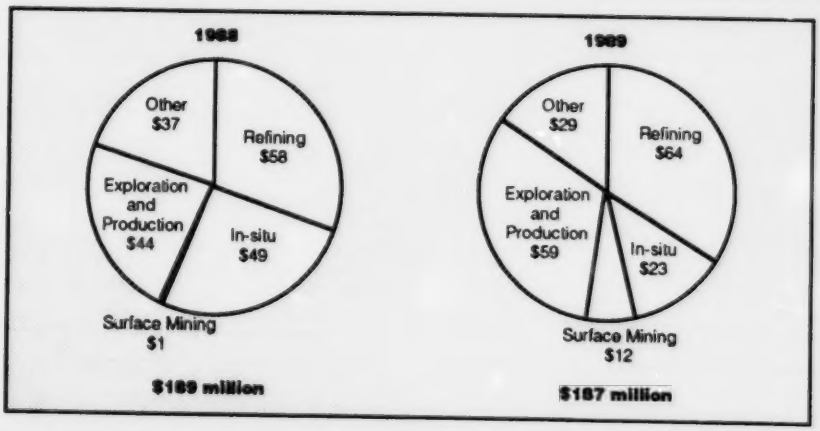
Energy technology R&D, other than that related to oil and gas, fell from $30 million (or 16%) of total 'in-house' R&D expenditures by major oil and gas enterprises to $24 million (or 13%) of such expenditures in 1989. Non-energy related R&D expenditures declined slightly to $5 million in 1989 (Appendix A24).

Table 17.
Sources of Funds Expended on 'In House' R&D in millions of dollars

	1988	1989
Internal	168	153
Parent, affiliated & subsidiary companies	10	14
Government grants & contracts	6	7
R&D performed on behalf of others	5	2
Other	–	11
Total 'In House' R&D	189	187

(1) Data are drawn from responses to two Statistics Canada questionnaires, *Research and Development in Canadian Industry* and *Energy R&D Expenditures by Area of Technology*, made available to the PMA under an agreement pursuant to the Statistics Act. There may be a small element of 'double counting' as the reported amount of 'in-house' R&D may include contract work performed for other petroleum companies.

Chart 14.
'In-house' R&D Expenditures by Activity in millions of dollars



Total R&D personnel employed by the surveyed companies decreased from 1142 persons in 1988 to 1092 persons in 1989. The percentage of scientists, engineers and senior R&D administrators was constant at 44% of all employees engaged in R&D.

'In-house' R&D expenditures by the petroleum industry during 1988(1) were equal to 0.7% of sales, while the average for all other non-financial industries was 1.7%.

Reporting companies provided 82% of the funds allocated to 'in-house' activity as indicated by Table 17. The remainder was obtained from federal and provincial government grants, contract work performed for other companies, and from allocations by parent and affiliated companies to Canadian subsidiaries.

The bulk of 'in-house' R&D activity in Canada was conducted in Alberta and Ontario (59% and 35%, respectively, of total outlays in 1989). R&D performed in Alberta during 1988 accounted for 42% of R&D personnel employment , while Ontario accounted for 56%.

Contract Expenditures

Energy and non-energy related contract R&D expenditures by PMA reporting companies totalled $107 million in 1989, up 10% from 1988. Research performed abroad on behalf of Canadian petroleum companies accounted for 73% of total contract R&D expenditures, a decrease of 7 percentage points over 1988.

(1) Comparable information for 1989 will not be available until 1991.

Table 18.
Contract R&D Spending in Canada and Abroad in millions of dollars

Recipient	In Canada 1988	In Canada 1989	Abroad 1988	Abroad 1989	Total 1988	Total 1989
Parent and Affiliated Companies	13	16	74	73	87	89
Other Corporations	4	9	3	5	7	14
Research Institutions & Other	3	4	–	–	3	4
Total	**20**	**29**	**77(a)**	**78(a)**	**97**	**107**

Note:
(a) Amounts of $69 million and $77 million represented outlays on energy-related technologies in 1988 and 1989 respectively. No breakdown is available between energy components for contract activities in Canada.

6

Ten–Year Operating Summary: 1980 – 1989

A ten–year perspective on the financial performance of the petroleum industry allows the identification of major trends and provides a more complete picture of its strengths and weaknesses.

The data presented here were derived from ten years of monitoring surveys, and are intended to provide a basis for comparing key financial and operating characteristics of the oil and gas industry over the period 1980 to 1989. Table 19 presents aggregate data for 120 reporting companies, as of the end of 1989, representing practically 100% of the PMA data base in terms of revenues. The table should be read in conjunction with Appendices A21, B17 and B18, which provide detailed data for this aggregation for each of the ten years. Appendices A4 and A5 present time series data for natural gas and crude oil prices.

Table 19.
Ten-Year Operating Summary: 1980 – 1989 in billions of current dollars

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Revenues										
Total Operations(a)	*44.2*	*53.0*	*57.2*	*59.3*	*62.7*	*66.3*	*47.6*	*49.2*	*47.0*	*50.2*
Upstream	16.1	17.3	21.0	24.0	26.7	28.0	17.0	17.9	15.8	17.2
Downstream	24.8	30.5	31.3	30.7	31.2	33.4	26.2	27.0	27.0	28.8
Internal Cash Flow										
Total Operations(a)	*9.6*	*8.4*	*7.4*	*8.7*	*10.8*	*11.6*	*8.0*	*9.4*	*9.0*	*8.9*
Upstream	6.7	5.3	5.8	7.4	8.5	9.5	5.5	6.8	5.8	6.4
Downstream	2.2	2.1	1.3	0.8	1.1	1.1	1.7	1.7	2.3	1.9
Net Income										
Total Operations(a)	*4.7*	*3.2*	*1.8*	*1.6*	*3.5*	*3.3*	*-2.8*	*3.2*	*2.2*	*1.3*
Upstream	2.9	1.7	2.1	2.5	2.9	3.3	-1.9	2.0	0.8	0.6
Downstream	1.5	1.4	0.4	-0.1	0.4	0.2	0.8	0.9	1.5	0.9
Capital Expenditures										
Upstream	6.9	6.9	6.5	6.8	8.0	9.3	6.3	5.5	6.8	5.4
Downstream	0.8	1.6	2.2	1.6	0.9	0.8	0.7	1.1	1.2	1.2
Other	0.6	1.7	1.9	1.2	0.9	0.9	0.4	0.4	0.6	0.6
Total in Canada	*8.3*	*10.2*	*10.6*	*9.6*	*9.8*	*10.9*	*7.4*	*7.1*	*8.5*	*7.2*
Expenditures Abroad	1.1	1.8	1.2	0.8	0.7	1.2	0.6	0.5	0.6	0.5
Total Capital Outlays	**9.4**	**12.0**	**11.8**	**10.4**	**10.5**	**12.1**	**7.9**	**7.6**	**9.1**	**7.7**
Dividend Payments	1.0	1.2	1.1	1.3	1.4	1.8	2.6	1.5	2.5	1.4
Total Capital Employed	**43.9**	**59.9**	**66.1**	**69.0**	**81.2**	**82.9**	**73.4**	**73.7**	**76.0**	**78.0**
					in percent					
Total Reinvestment Rates(b)	100	136	138	101	81	87	88	75	96	85
Upstream Reinvestment Rates(b)	103	114	86	70	72	77	98	74	110	82
GNE Deflator	100.0	111.8	124.2	132.0	135.8	139.5	142.6	147.6	151.7	156.6

Notes:
(a) Includes 'other Canadian' and foreign operations.
(b) For definitions, see notes a and b, Appendix A15.

Noteworthy Trends

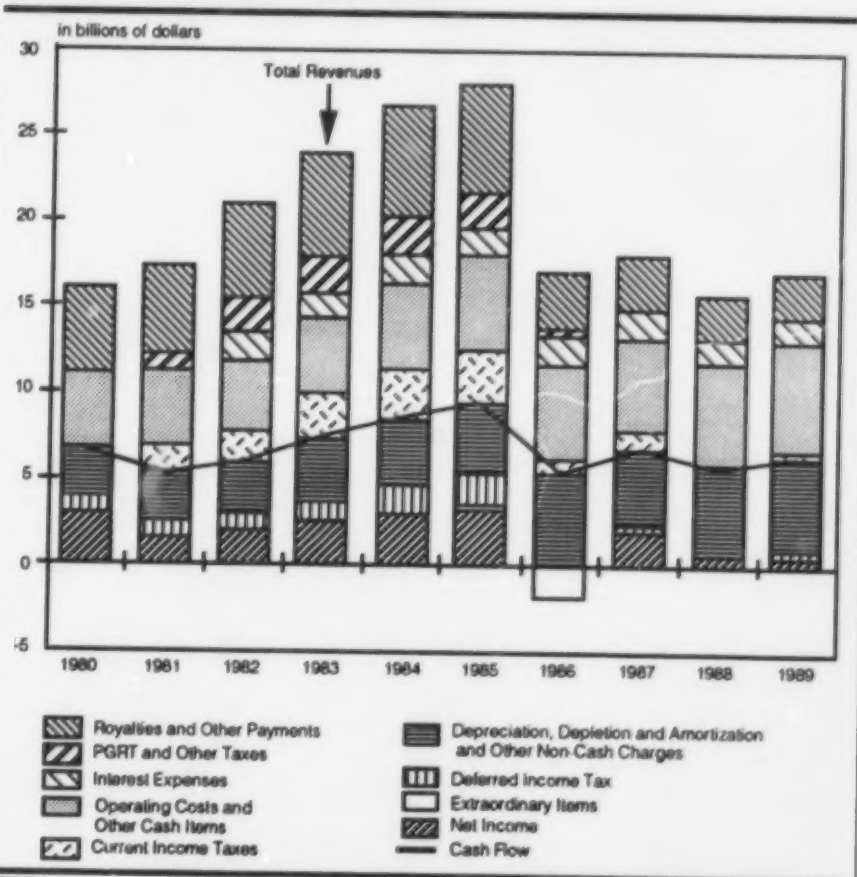
1. Total revenues of the industry are largely a function of oil and gas prices as they determine both upstream and downstream revenues. Consequently, as crude oil prices steadily rose after the 1979 oil shock, so did the industry's overall revenues — peaking at $66 billion in 1985. The crude oil price decline, which commenced in January 1986 and fell to its lowest average level in nearly a decade by 1988, brought overall industry revenues down by about 25% from the 1985 high.

2. Internal cash flow, over the ten-year period, ranged from a low of $7.4 billion in 1982 to a high of $11.6 billion in 1985 and stood at $8.9 billion in 1989. Cash flow from operations is a reasonable indicator of industries health for the short run. However, since cash flow excludes non-cash charges (such as depreciation and depletion), net income is a better indicator for the longer term.

3. Net income of the petroleum industry is significantly influenced not only by oil prices and related changes in production and in royalty rates, and energy taxes, but also by non-cash charges such as depletion, depreciation and amortization. The timing of such write-offs, in turn, may be affected by new accounting standards or management's decision to change accounting policies e.g. from full cost to successful efforts.

Industry net income was at its highest point in 1980 but declined as the Canadian sector of the industry was seriously affected by rising interest charges as debt grew rapidly – mainly for takeover activity. Subsequent to the imposition of new energy taxes and higher provincial royalties, net income declined steadily through to 1983, improved as a result of lower energy taxes in 1984 and 1985, and fell to a loss of $2.8 billion in 1986 — the poorest performance in recent history.

Chart 15.
Upstream Income Data: 1980 – 1989



Note:
Interest expenses are included with operating costs in 1980.

The 1986 price declines, accompanied by increased non–cash charges for depletion, depreciation, amortization and asset write–downs by full cost accounting method practitioners (as required under CICA guidelines) caused the industry to report losses in spite of the elimination of energy taxes and the reduction in royalty rates.

After a slight improvement in 1987, the industry's performance continued to deteriorate through 1988 and 1989. Net income fell to $1.3 billion, the second lowest level after 1986. In spite of relatively stable prices for crude oil and a rising demand for natural gas, the net income was negatively affected by increasing operating costs and interest charges, attributable to higher debt to finance acquisitions.

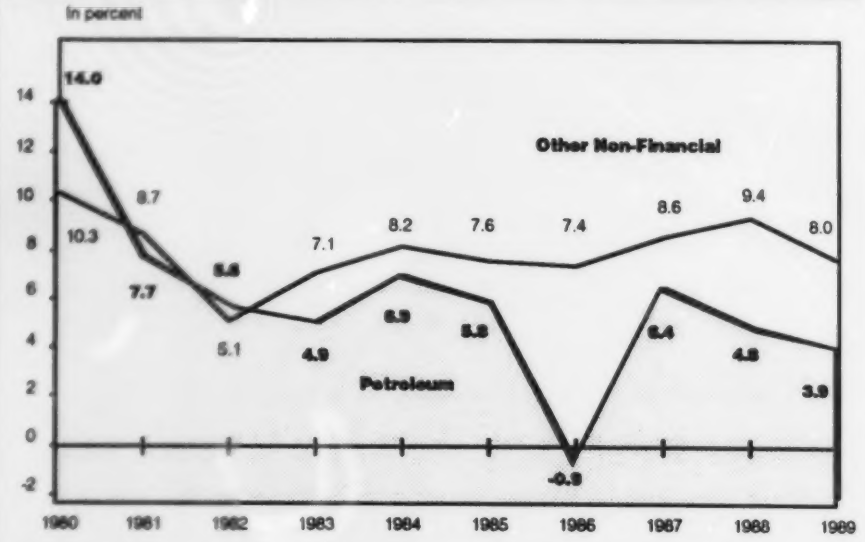
4. Total capital expenditures grew between 1980 and 1985, to reach an all time high of $12.1 billion. This increase was fuelled by intense activity on Canada Lands and abroad. The decline in crude oil and natural gas prices which started in 1986, resulted in a significant reduction in capital expenditures between 1986 and 1989, falling to levels below those of 1980.

5. The reinvestment rate for total industry rose rapidly between 1980 and 1982, as a result of the high levels of capital expenditures for both upstream and downstream activities. By 1987, it had declined to the lowest level in ten years at 75%, rebounded sharply in 1988, and declined again in 1989 to 85%.

6. Dividend payments rose steadily from $1.0 billion in 1980 to $1.8 billion in 1985, and reached a ten–year peak at $2.6 billion in 1986. In 1989 dividend payments reached $1.4 billion, a sharp decline from the $2.5 billion of 1988.

7. Since 1982, the rate of return on capital employed for the petroleum industry has been consistently below that for all other non–financial industries. In 1989, the return for the petroleum industry was 3.9% vs. 8% for all other non–financial industries (Appendix A14).

Chart 16.
Rate of Return on Capital Employed: Petroleum vs. Other Non–Financial Industries



Appendices

Appendix A Supplementary Information

A1

Year In Review

1989

Jan 1
The Canada–United States Free Trade Agreement came into effect.

Mar 28
The fourth natural gas price monitoring report was released. It concluded that during the period from May to November 1988 Canadian consumers continued to benefit from domestic prices which were lower than export prices.

Apr 28
The Minister of Energy, Mines and Resources announced the early termination of the CEDIP incentive program.

May 30
Following a ministerial level meeting of the Governing Board of the International Energy Agency, Canada's Minister of Energy, Mines and Resources outlined this country's commitment to countering global warming by identifying the way in which energy policies can be made environmentally sustainable and by encouraging the development and commercialization of new energy efficient technologies.

Jun 20
The Department of Energy, Mines and Resources presented detailed information to a House of Commons Committee showing that 56% of the money available under CEDIP, $1.25 billion ($400 million more than forecast), went to small firms and applicants while the balance was paid to companies having more than $10 million in annual eligible expenses.

Jun 28
The International Energy Agency released its report on Canada's energy policies which stated that the Free Trade Agreement provides Canada with a secure energy future because of its increased market access and dependable investment climate.

Oct 2
The ministers of energy for Canada and for Alberta announced an agreement providing for $28 million in Market Development Incentive Payments. The funds will be directed to projects which will contribute, over the next five years, to a viable, self–sustaining natural gas vehicle industry in Canada and achieve an initial market penetration of methanol as a vehicle fuel.

Nov 3
A $506 million agreement on the construction of the Vancouver Island Natural Gas Pipeline was signed by Canada, British Columbia, and the Pacific Coast Energy Corporation which is equally owned by Westcoast Energy Inc. and Alberta Energy Co. The federal and provincial governments will contribute $150 million under the deal.

A1
(continued)

1990

Jan 5
Canada's and Nova Scotia's energy ministers announced proclamation of the federal and provincial legislation to implement the 1986 Offshore Petroleum Resources Accord between the two governments. Also announced were the appointments of a Chairman and members to the Canada Nova Scotia Offshore Petroleum Board.

Feb 20
Canada's Minister of Finance announced the 1990–91 federal budget. The petroleum industry was affected by the cancellation of federal support for the OSLO oil sands project and by the termination of the Canadian Exploration Incentive Program (CEIP). Details of the decision were released by the Minister of Energy, Mines and Resources on February 21 and included a one year grandfathering provision for eligible expenditures incurred after the termination date.

Mar 9
The Minister of Energy, Mines and Resources announced details of the CEIP grandfathering provisions in Information Circular IC–CEIP–90–1.

A2 Petroleum Supply and Demand Summary[a] [b]

	1988	1989	Change
	thousands m^3/day		%
Production			
Crude Oil	274	266	- 3
Natural Gas Liquids[c]	43	47	9
Total Production	**317**	**313**	**- 1**
Net Exports[d]			
Crude Oil	42	26	- 39
Natural Gas Liquids	18	19	1
Refined Products	12	6	- 54
Total Net Exports	**72**	**51**	**- 32**
Consumption			
Natural Gas Liquids	37	38	3
Refined Products	241	249	3
Total Consumption	**278**	**287**	**3**

Notes:

(a) Petroleum includes conventional and synthetic crude oil and natural gas liquids (propane, butane and ethane) derived from gas processing and gas reprocessing plants. Data on the production, net exports and consumption do not represent a complete supply/demand balance as industry's own use and stock changes are not shown.

(b) Figures represent total industry activity and are derived from a number of sources:
- Production – Statistics Canada (Catalogue 26-006)
- Net Exports – EMR Petroleum & Emergency Planning Branch
- Consumption – Statistics Canada (Catalogue 45-004)

(c) Does not include refinery production of 8.8 thousand m^3/d in 1989 and 8.6 thousand m^3/d in 1988.

(d) On a gross basis, crude oil imports (including exchange receipts) for 1988 and 1989 were 71,100 m^3/d and 77,400 m^3/d (447,400 b/d and 487,100 b/d) respectively, or 26% and 27% of domestic consumption in those periods.

A3 Natural Gas Supply and Demand Summary[a]

	1988	1989	Change
	millions m^3/day		%
Production			
Gross New Production	357	375	5
less:			
Injected, Shrinkage and Adjustments	78	80	2
Indigenous Supply	279	295	6
less:			
Producer Consumption	30	31	5
Marketable Production	**249**	**264**	**6**
Net Exports	**97**	**102**	**4**
Consumption			
Energy Use	136	142	4
Non-energy Use	12	13	7
Converted to Electricity and Other	5	7	73
Total Consumption	**153**	**162**	**7**
NEB Export Authorization	**158**	**162**	**3**

Note:

(a) Figures represent total industry activity and are derived from a number of sources:
- Production – Statistics Canada (Catalogue 26-006)
- Net Exports – EMR Petroleum & Emergency Planning Branch
- Consumption – Statistics Canada (Catalogue 45-004)

A4 Canadian Natural Gas Prices: 1977 – 1989 in dollars per gigajoule

	Field Gate Including Export Flow Back	Alberta Border	Toronto City Gate	Weighted Ontario Sales Realization	Ontario Market		
					Residential	Commercial	Industrial
1977	1.21	1.04	1.47	1.85	2.44	1.96	1.37
1978	1.44	1.28	1.77	2.14	2.74	2.22	1.90
1979	1.66	1.36	1.92	2.35	3.03	2.43	2.06
1980	2.30	1.61	2.23	2.69	3.43	2.73	2.36
1981	2.34	1.75	2.42	3.40[a]	4.24	3.41	3.03
1982	2.53	2.01	2.80	4.16[a]	4.93	4.12	3.70
1983	2.48	2.48	3.38	4.74[a]	5.72	4.78	4.15
1984	2.61	2.78	3.71	4.77	5.79	4.86	4.16
1985	2.47	2.80	3.76	4.76	5.84	4.86	4.14
1986[b]	2.32	2.80	3.78	4.73	5.79	4.81	4.04
1987	–	–	–	4.39	6.01	4.72	3.54
1988							
Jan				4.51	5.48	4.64	3.33
Feb				4.48	5.49	4.62	3.28
Mar				4.57	5.51	4.57	3.64
Apr				4.38	5.53	4.58	3.32
May				4.38	5.85	4.65	3.50
Jun				4.09	6.01	4.29	3.45
Jul				4.30	6.14	4.33	3.66
Aug				4.24	6.92	4.72	3.38
Sep				4.29	6.73	4.60	3.53
Oct				4.28	5.78	4.53	3.38
Nov				4.50	5.55	4.53	3.76
Dec				4.58	5.44	4.53	3.79
Average				4.38	5.87	4.55	3.50
1989							
Jan				4.52	5.20	4.63	3.64
Feb				4.58	5.36	4.55	3.77
Mar				4.59	5.36	4.59	3.80
Apr				4.24	5.16	4.28	3.43
May				3.44	4.19	3.37	3.05
Jun				3.26	4.43	3.71	2.76
Jul				3.97	6.31	4.16	3.19
Aug				3.76	6.25	4.04	3.00
Sep				3.65	5.11	3.52	3.24
Oct				3.82	4.77	4.11	3.22
Nov				4.03	5.03	4.09	3.29
Dec				4.27	5.04	4.31	3.37
Average				4.01	5.18	4.11	3.31

Source:
Statistics Canada (Catalogue 55-002)

Notes:
(a) The rising average sales realizations for the years 1981 to 1983 reflect the imposition of the Natural Gas and Gas Liquids Tax.
(b) Effective November 1, 1986, a new gas agreement between the federal and provincial governments provided for the deregulation of natural gas prices and markets. As a result, the price of natural gas in domestic markets is now subject to the interplay between buyers and sellers.

A5 Canadian Crude Oil Prices: 1981 – 1989

	Conventional Crude Oil Wellhead Price[a]		Petroleum Compensation & Other Charges		Cost of Crude Oil Exclusive of Transportation[b]		Refiner Acquisition Cost at Montreal	
	$/bbl	$/m³	$/bbl	$/m³	$/bbl	$/m³	$/bbl	$/m³
1981								
Jan 1	17.75	111.70	5.05	31.77	22.80	143.47	24.07	151.47
1982								
Jan 1	23.50	147.89	7.45	46.89	30.95	194.78	32.54	204.77
1983								
Jan 1	29.75	187.22	4.91	30.89	34.66	218.11	35.79	225.25
1984								
Nov 10	29.75	187.22	7.69	48.39	37.44	235.61	39.44	248.21
1985								
Jun 1	36.40	229.06					38.30	241.02
1986								
Jan	32.79	206.34					34.76	218.93
Feb	22.20	139.70					24.18	152.16
Jul	14.60	91.88					16.58	104.34
Dec	19.23	121.01					21.30	134.04
1987								
Jan	22.74	143.10					24.87	156.51
Mar	20.36	128.13					22.48	141.47
Jul	25.17	158.39					27.32	171.92
Dec	20.95	131.84					23.14	145.62
1988								
Jan	19.44	122.34					21.60	135.93
Feb	19.02	119.69					21.17	133.22
Mar	17.67	111.20					19.81	124.66
Apr	19.10	120.20					21.23	133.60
May	19.43	122.27					21.56	135.68
Jun	18.43	115.98					20.55	129.32
Jul	16.20	101.95					18.32	115.29
Aug	16.77	105.54					18.90	118.94
Sep	15.94	100.31					18.05	113.71
Oct	14.43	90.81					16.55	104.15
Nov	14.54	91.50					16.65	104.77
Dec	16.04	100.94					18.15	114.22
1989								
Jan	18.52	116.55					20.67	130.05
Feb	18.43	115.98					20.57	129.47
Mar	19.84	124.83					21.99	138.34
Apr	21.88	137.71					24.03	151.21
May	21.72	136.67					23.86	150.18
Jun	21.53	135.47					23.68	149.00
Jul	21.57	135.71					23.74	149.37
Aug	19.47	122.54					21.66	136.32
Sep	20.57	129.45					22.77	143.29
Oct	21.33	134.23					23.53	148.07
Nov	20.85	131.21					23.05	145.05
Dec	21.62	136.06					23.81	149.84

Source:
Energy, Mines and Resources, Petroleum and Emergency Planning Branch

Notes:
(a) Starting June 1, 1985, i.e. following deregulation, the wellhead price shown here is the Edmonton purchase price less estimated gathering costs of approximately $3.90/m³ (62¢/bbl).
(b) Gathering and transportation costs, and charges as applicable, make up the difference between the wellhead price and the refiner acquisition cost at Montreal. These costs amounted to $13.78/m³ ($2.19/bbl) on December 1, 1989.

A6 Average Crude Oil Refiner Acquisition Costs by Region

in dollars per cubic metre[1]

	British Columbia	Prairie Provinces	Ontario	Quebec[2]	Atlantic[2]	Total Canada
1988						
Sep	113.90	103.19	114.30	112.19	111.41	110.59
Oct	108.53	93.36	108.37	107.10	101.88	103.77
Nov	100.83	93.78	103.40	102.78	101.55	100.26
Dec	103.73	102.56	105.53	107.58	111.01	105.47
1989						
Jan	118.38	120.57	114.57	115.24	122.61	117.85
Feb	120.52	117.45	125.99	129.19	134.98	125.58
Mar	126.20	129.63	129.61	134.30	139.86	131.55
Apr	135.89	140.73	138.20	143.74	148.35	141.06
May	145.13	139.62	147.53	143.84	146.72	144.63
Jun	145.86	137.99	147.91	143.25	144.21	143.78
Jul	144.89	139.40	148.08	139.94	137.29	142.53
Aug	141.41	125.61	144.25	133.13	131.26	134.92
Sep	136.15	131.32	140.14	130.97	130.31	134.08
Oct	137.47	135.36	140.64	139.30	142.24	138.31
Nov	140.16	136.16	143.08	141.94	142.88	140.71
Dec	141.37	139.97	142.98	145.51	147.42	143.29

Source:
Energy, Mines and Resources, Petroleum and Emergency Planning Branch

(1) The variation in average refiner acquisition cost by region is due to quality differences and the lag time between the actual purchase and delivery dates. Assuming an estimated delivery time from Edmonton to Montreal of six weeks, receipts of any given month at Montreal reflect a mixture of crude purchases made during the two previous months.

(2) The exact average cost of crude oil imports is not available for Quebec and the Atlantic region due to confidentiality considerations. Therefore, the average cost of imports for total eastern Canada has been used to determine the regional averages for Quebec and Atlantic.

A7 Average Crude Oil Transporation Costs from Edmonton

in dollars per cubic metre[1]

	Vancouver	Regina	Sarnia	Toronto	Montreal
1988					
Sep	5.78	2.05	7.34	7.96	9.48
Oct	5.78	2.05	7.26	7.89	9.40
Nov	5.78	2.05	7.30	7.93	9.44
Dec	5.78	2.05	7.24	7.86	9.38
1989					
Jan	5.78	2.13	7.37	8.02	9.60
Feb	5.78	2.13	7.36	8.02	9.59
Mar	6.72	2.13	7.39	8.04	9.61
Apr	6.72	2.13	7.37	8.03	9.60
May	6.72	2.13	7.39	8.04	9.61
Jun	6.72	2.13	7.40	8.06	9.63
Jul	6.72	2.19	7.47	8.14	9.76
Aug	6.72	2.25	7.53	8.22	9.88
Sep	6.72	2.25	7.54	8.24	9.89
Oct	6.72	2.25	7.52	8.21	9.87
Nov	6.72	2.25	7.50	8.20	9.85
Dec	6.72	2.25	7.48	8.17	9.83

Source:
Energy, Mines and Resources Canada, Petroleum and Emergency Planning Branch

(1) Includes pipeline tariffs and pipeline losses but excludes trucking charges.

A8 Canadian Acquisition Costs vs. Product Prices in cents per litre

	Average Unit Revenue from Total Petroleum Product Sales[1]	Average Refiner Acquisition Cost (Unit) (lagged 60 days)[2]	Differential (To cover R&M Costs and Profits, and Retail Margin)
1985			
Dec	33.74	23.47	10.27
1986			
Jan	34.37	23.09	11.28
Feb	34.25	23.06	11.19
Mar	31.82	23.05	8.77
Apr	27.93	19.36	8.57
May	25.82	14.53	11.29
Jun	25.72	11.73	13.99
Jul	24.91	11.73	13.18
Aug	23.91	11.78	12.13
Sep	23.84	10.68	13.16
Oct	23.71	11.10	12.61
Nov	23.58	12.03	11.55
Dec	23.34	12.50	10.84
1987			
Jan	22.74	12.48	10.26
Feb	23.86	12.90	10.96
Mar	24.08	14.02	10.06
Apr	24.20	14.77	9.43
May	23.38	14.32	9.06
Jun	24.34	14.88	9.46
Jul	24.54	15.00	9.54
Aug	24.79	15.49	9.30
Sep	25.14	16.17	8.97
Oct	24.65	16.44	8.21
Nov	25.00	15.89	9.11
Dec	24.99	15.45	9.54
1988			
Jan	24.43	15.46	8.97
Feb	23.98	14.69	9.29
Mar	23.63	13.80	9.83
Apr	23.31	13.20	10.11
May	22.88	12.41	10.47
Jun	22.62	12.43	10.19
Jul	22.84	12.71	10.13
Aug	22.16	12.41	9.75
Sep	21.81	11.61	10.20
Oct	21.61	11.43	10.18
Nov	21.67	11.06	10.61
Dec	20.67	10.38	10.29
1989			
Jan	21.22	10.03	11.19
Feb	21.75	10.55	11.20
Mar	22.05	11.79	10.26
Apr	22.44	12.56	9.88
May	23.35	13.16	10.19
Jun	23.36	14.11	9.25
Jul	23.71	14.46	9.25
Aug	23.55	14.38	9.17
Sep	23.48	14.25	9.23
Oct	23.19	13.49	9.70
Nov	23.39	13.41	9.98
Dec	23.27	13.83	9.44

Sources:
(1) Statistics Canada, Prices Division
(2) Energy, Mines and Resources Canada, Petroleum and Emergency Planning Branch

A9 Average Net Prices for Selected Major Petroleum Products and Trade Classes by Region in cents per litre[1]

	1988	1989	Change[2]
Regular Unleaded Gasoline – Branded Retail			
Atlantic	28.7	28.3	– 0.5
Quebec	28.5	28.2	0.3
Ontario	25.1	25.4	0.3
Prairies	24.9	26.4	1.5
Pacific	25.8	28.3	2.5
Total Canada	26.2	26.7	0.5
Diesel Fuel – Commercial and Industrial			
Atlantic	21.1	21.2	0.1
Quebec	19.5	19.6	0.1
Ontario	20.2	19.6	0.6
Prairies	19.6	19.6	–
Pacific	20.0	20.1	0.1
Total Canada	19.9	19.8	– 0.1
Light Fuel Oil – Branded Retail			
Atlantic	26.7	26.4	– 0.3
Quebec	25.4	24.9	– 0.5
Ontario	29.2	27.2	– 2.0
Pacific	28.0	27.4	– 0.6
Total Canada	27.6	26.3	– 1.3
Heavy Fuel Oil # 6 – All trade classes			
Atlantic	11.1	11.8	0.7
Quebec	9.7	10.3	0.6
Ontario	11.1	11.8	0.7
Pacific	10.1	10.7	0.6
Total Canada	10.8	11.9	1.1
Total Petroleum Products[3] – All trade classes			
Atlantic	22.9	22.3	– 0.6
Quebec	21.1	21.4	0.3
Ontario	22.8	22.8	–
Prairies	23.3	23.7	0.4
Pacific	22.5	24.4	1.9
Total Canada	22.5	22.9	0.4

Source:
Statistics Canada, Prices Division

(1) Weighted average prices shown were derived from volumes and sales revenue data reported through a survey of major refiners for a wide range of finely specified products and trade classes. The prices are net of provincial road taxes, federal sales and excise taxes, and dealer margins.

(2) This represents the change in net prices compared to the year earlier period.

(3) This represents the summation of petroleum products from the sample selection reported to Statistics Canada in their survey.

A10 Petroleum Product Prices for Selected Major Products Sold to Private Brand Resellers

	1988		1989	
	Price ¢ / litre	Market Share[1] %	Price ¢ / litre	Market Share[1] %
Premium Unleaded Gasoline				
Quebec	20.9	10.5	22.7	12.3
Ontario	20.5	12.2	22.2	13.3
Prairies	19.3	4.5	21.1	5.8
Regular Unleaded Gasoline				
Quebec	18.9	12.8	19.7	15.5
Ontario	19.4	20.4	20.2	24.2
Prairies	19.5	9.4	20.5	10.0
Regular Leaded Gasoline				
Quebec	18.1	20.2	19.2	20.1
Ontario	19.0	25.4	19.4	23.3
Prairies	18.0	12.4	17.9	14.7
Diesel Fuel				
Quebec	17.8	15.3	18.5	17.3
Ontario	18.0	11.3	18.3	12.9
Light Fuel Oil				
Quebec	17.5	30.4	17.6	27.4
Ontario	17.9	30.7	18.0	31.8
Pacific	23.2	15.6	20.7	17.8

Source:
Statistics Canada, Prices Division

(1) Reflects an estimated market share of sales by reporting refiners, excluding product imports.

A11 Oil Products Sales Volumes: Refiners and Marketers

in millions of cubic metres

	Nationals			Regionals			Total		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Clean Products	48.7	49.2	1	20.7	22.5	9	69.3	71.8	3
Heavy and Specialty Products	11.1	11.4	2	5.0	5.7	13	16.1	17.0	6
Total Sales	**59.8**	**60.8**	**1**	**25.7**	**28.2**	**10**	**85.5**	**88.8**	**4**
less: Exports	3.2	3.2	1	2.5	3.1	27	5.6	6.3	12
Gross Sales in Canada	**56.6**	**57.4**	**1**	**23.2**	**25.1**	**8**	**79.8**	**82.5**	**3**
less: Sales to Other Refiners	0.2	0.7	187	0.3	0.5	65	0.5	1.2	117
Net Sales in Canada	**56.4**	**56.7**	**1**	**22.9**	**24.6**	**7**	**79.3**	**81.3**	**3**

A12 Net Income by Sector and Segment in millions of dollars

	1988	1989	Change	Change %
Canadian-Controlled Companies				
Upstream	646	227	-419	-65
Downstream	516	292	-224	-43
Other Canadian Operations	85	-63	-148	-
Foreign Activities	-246	4	250	-
Total Canadian-Controlled	**1001**	**460**	**-541**	**-54**
Foreign-Controlled Companies				
Upstream	141	397	256	182
Downstream	964	632	-332	-34
Other Canadian Operations	40	-284	-323	-
Foreign Activities	34	117	83	244
Total Foreign-Controlled	**1178**	**862**	**-316**	**-27**
Total Industry				
Upstream	787	624	-163	-21
Downstream	1479	924	-555	-38
Other Canadian Operations	125	-347	-471	-
Foreign Activities	-212	121	333	-
Grand Total	**2179**	**1321**	**-857**	**-39**

A13 Rates of Return: Canadian Petroleum Industry in percent

	1984	1985	1986	1987	1988	1989	Five-Year Average ending in 1988	Five-Year Average ending in 1989
Return on Average Capital Employed								
Upstream								
Canadian-Controlled Companies	5.5	6.2	-4.6	4.9	4.6	2.7	3.3	2.8
Foreign-Controlled Companies	11.4	9.5	4.2	9.0	2.9	3.3	7.4	5.8
Total Industry	8.0	7.6	-1.1	6.6	3.6	3.0	4.9	3.9
Downstream[a]								
Canadian-Controlled Companies	3.9	-1.8	5.9	3.9	6.1	4.6	3.6	3.7
Foreign-Controlled Companies	4.0	3.2	7.5	8.2	9.3	6.7	6.4	7.0
Total Industry*	4.0	1.4	6.8	6.4	7.9	5.9	5.3	5.7
Total Operations[b]								
Canadian-Controlled Companies	5.8	4.8	-4.6	4.8	4.7	3.6	3.1	2.7
Foreign-Controlled Companies	8.3	7.2	4.4	8.4	4.9	4.2	6.6	5.8
Total Industry	6.9	5.8	-0.9	6.4	4.8	3.9	4.6	4.0
*Memo:								
National Refiners/Marketers	3.3	0.8	6.6	5.9	6.7	5.5	4.7	5.1
Regional Refiners/Marketers	6.2	2.8	7.4	7.7	10.5	6.6	6.9	7.0
Return on Average Equity								
Canadian Operations								
Canadian-Controlled Companies	5.0	5.6	-15.7	5.1	6.6	2.4	1.3	0.8
Foreign-Controlled Companies	12.7	11.1	5.9	12.6	5.8	3.6	9.6	7.8
Total Industry	9.2	8.3	-5.2	8.9	6.2	3.0	5.5	4.2
Total Operations[b]								
Canadian-Controlled Companies	5.8	5.5	-19.9	5.2	5.2	2.5	0.4	-0.3
Foreign-Controlled Companies	12.7	11.0	5.9	12.6	5.8	4.0	9.6	7.9
Total Industry	9.5	8.2	-7.5	8.9	5.5	3.3	4.9	3.7

Notes:

(a) Downstream here represents oil products operations only, i.e. it excludes petrochemical and other downstream operations.

(b) Upstream, downstream (here also includes petrochemicals and other downstream activities), other Canadian and foreign operations.

A14 Rates of Return: Non-Financial Industries Excluding Petroleum

in percent

	1984	1985	1986	1987	1988	1989	Five-Year Average ending in 1988	Five-Year Average ending in 1989
Return On Shareholders Equity[a]								
Non-Financial Industries	10.8	9.7	9.6	11.4	13.5	10.9	11.0	11.0
Manufacturing	12.1	10.2	10.5	13.3	17.0	11.7	12.6	12.6
Mining	2.2	0.7	1.2	10.8	12.7	14.4	5.5	7.9
Other Industries	11.5	11.3	10.5	9.4	9.8	9.2	10.5	10.0
Return On Capital Employed[b]								
Non-Financial Industries	8.2	7.6	7.4	8.6	9.4	8.0	8.3	8.2
Manufacturing	9.7	8.4	8.5	10.3	12.3	8.9	9.8	9.7
Mining	3.4	1.9	2.2	8.7	9.6	10.8	5.1	6.7
Other Industries	8.0	7.9	7.5	6.9	7.1	6.9	7.5	7.3

Source: Statistics Canada 61-003, Industrial Corporations Quarterly

Notes:

(a) Return on equity is defined as net profit after tax and extraordinary items, divided by average book equity. It measures the rate of return on shareholders' investment (paid-in capital and retained earnings). This measure is often used to compare the performance of companies that may vary by type and by size.

(b) Capital employed is defined as total assets, less current liabilities. The net income figures used to compute rate of return on capital employed have been adjusted by adding the after-tax interest expense on borrowed funds.

A15 Reinvestment Rates in percent

	Total[a] 1988	Total[a] 1989	Upstream[b] 1988	Upstream[b] 1989	Upstream[c] plus Downstream 1988	Upstream[c] plus Downstream 1989
Integrateds & Refiners	77	82	101	71	77	70
Oil and Gas Producers						
Senior Producers	103	72	99	70	98	69
Junior Producers	139	115	151	119	147	119
Total Oil and Gas Producers	115	86	115	87	113	85
Total Industry	**96**	**85**	**110**	**82**	**95**	**78**
Canadian-Controlled	112	96	120	92	109	89
Foreign-Controlled	86	77	103	74	86	71

Notes:

(a) Total capital expenditures (net of incentive grants) as a percentage of total internal cash flow. The calculations do not reflect changes in inventories. Had changes in the cost of inventories been included, the reinvestment rate would have been 86% in 1988 vs. 93% in 1989.

(b) Upstream capital expenditures (net of incentive grants) in Canada as a percentage of upstream cash flow.

(c) Net upstream plus downstream ('petroleum-related') capital expenditures in Canada as a percentage of internal cash flow generated by petroleum-related activities.

A16 Gross Exploration Expenditures in Canada by Area in millions of dollars

	1988	1989	Change %
Provincial Lands			
British Columbia	290	330	13
Alberta	2026	1583	- 22
Saskatchewan	158	110	- 31
Other Provinces	18	8	- 56
Total Provincial Lands	**2492**	**2030**	**- 19**
Canada Lands			
Beaufort Sea	223	241	8
Labrador East	185	90	- 51
Atlantic Shelf South	57	18	- 69
Other Canada Lands	38	63	65
Total Canada Lands	**504**	**412**	**- 18**
Total Canada	**2996**	**2442**	**- 18**

A17 Incentive Grants by Area and Type of Expenditure in millions of dollars

	Exploration	Development and Production	Total	Canadian-Controlled	Foreign-Controlled
British Columbia					
1988	5	6	11	3	8
1989	10	10	20	9	11
Alberta					
1988	122	96	218	115	103
1989	55	51	106	54	52
Saskatchewan					
1988	10	18	28	21	7
1989	3	6	9	8	2
Other Provinces					
1988	2	1	3	3	–
1989	1	1	1	2	–
Beaufort Sea					
1988	–	–	–	–	–
1989	2	–	2	1	1
Labrador East					
1988	–	–	–	–	–
1989	–	–	–	–	–
Atlantic Shelf South					
1988	5	–	5	5	–
1989	–	–	–	–	–
Other Canada Lands					
1988	1	–	1	–	–
1989	–	–	–	–	–
Total					
1988	145	122	266	148	119
1989	71	68	139	74	65

A18 Well Completions and Metres Drilled in Canada

	Exploratory			Development		
	1988	1989	Change %	1988	1989	Change %
Well Completions in number of wells						
British Columbia	75	87	16	127	121	- 5
Alberta	2253	1837	- 19	4179	1833	- 56
Saskatchewan	559	432	- 23	1535	991	- 35
Other Provinces	76	60	- 21	119	86	- 28
Northern Canada[a]	6	5	- 17	8	-	-
Offshore[b]	9	2	- 78	-	-	-
Total	**2978**	**2423**	**- 19**	**5968**	**3031**	**- 49**
Metres Drilled in thousands						
British Columbia	159	157	- 1	209	216	3
Alberta	3331	2588	- 22	4599	2112	- 54
Saskatchewan	496	344	- 31	1265	753	- 40
Other Provinces	57	50	- 13	84	58	- 32
Northern Canada[a]	20	10	- 49	10	-	-
Offshore[b]	29	7	- 78	-	-	-
Total	**4092**	**3156**	**- 23**	**6167**	**3139**	**- 49**

Source:
Oilweek, February 19, 1990

Notes:
(a) All areas in Canada North of 60°, including Hudson Bay.
(b) East coast and West coast offshore areas.

A19 Comparison of Interest Charges with Income before Interest and Taxes: 1989 in millions of dollars[a]

	(1) Income Before Interest and Taxes	(2) Interest Charges Incurred	(3) Interest Coverage Ratio times
Integrateds and Refiners	**3121**	**1214**	**2.6**
Oil and Gas Producers			
Senior Producers	1570	920	1.7
Junior Producers	609	513	1.2
Total Oil and Gas Producers	2180	1432	1.5
Total Industry	**5301**	**2646[b]**	**2.0**
Canadian-Controlled	2105	1106	1.9
Foreign-Controlled	3195	1540	2.1

Notes:
(a) The figures in Column 1 represent the total of income from total operations before taxes and expensed interest. Column 2 shows total interest charges incurred (both expensed and capitalized). Column 3 is the ratio of Column 1 to Column 2.
(b) In addition to the $2.5 billion of interest charges expensed in 1989, $110 million was capitalized (mostly by foreign-controlled companies).

A20 Dividend Payments

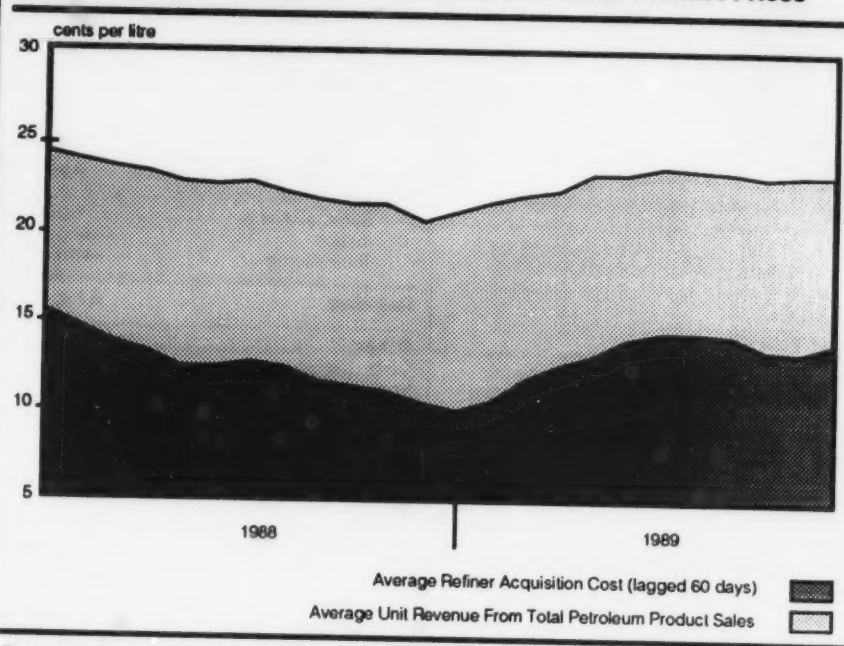
	1988	1989	1988	1989
	$ millions		% of net income[a]	
Integrateds and Refiners	**1727**	**771**	**105**	**69**
Oil and Gas Producers				
Senior Producers	499	436	424	156
Junior Producers	240	162	59	n/a[b]
Total Oil and Gas Producers	739	599	140	302
Total Industry	**2466**	**1369**	**113**	**104**
Canadian-Controlled	985	565	98	123
Foreign-Controlled	1481	805	126	93

Note:
(a) Derived by dividing dividend payments for each company group by their net income on total operations (Appendices B1–7).
(b) The payout rate is not meaningful due to negative net income.

A21 Income and Expense Statement: 1980 – 1989 as percent of revenues

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Upstream										
Revenues	100	100	100	100	100	100	100	100	100	100
Royalties and other Payments	31	29	27	25	24	23	19	17	16	16
PGRT and other Taxes	–	6	9	8	8	7	3	–	–	–
Interest Expenses	–	–	7	6	6	6	10	9	9	7
Operating Costs and other Cash Items	21	27	20	18	18	20	32	29	38	37
Current Income Taxes	6	8	9	11	11	11	5	6	–	2
Cash Flow	42	31	28	31	32	34	32	38	37	38
Depreciation, Depletion and Amortization	8	8	8	12	10	11	25	21	24	25
Other Non-cash Charges	9	8	5	4	4	4	7	5	9	6
Deferred Income Tax	7	5	5	5	7	6	–	2	1	3
Extraordinary Gains	–	–	–	–	–	– 1	– 12	1	1	–
Net Income	18	10	10	11	11	12	– 11	11	5	4
Downstream										
Revenues	100	100	100	100	100	100	100	100	100	100
Sales, Excise and other Taxes	7	6	6	6	6	7	11	15	16	16
Cost of Goods Sold	69	75	80	83	80	79	68	64	58	59
Interest Expenses	–	–	1	1	1	1	–	–	–	1
Operating Costs and other Cash Items	11	10	10	10	9	10	13	13	14	15
Current Income Taxes	4	3	– 1	– 1	–	–	2	2	3	2
Cash Flow	9	7	4	3	3	3	6	6	9	7
Depreciation, Depletion and Amortization	2	1	2	2	2	3	2	3	3	3
Other Non-cash Charges	–	–	–	–	–	–	–	–	–	–
Deferred Income Tax	1	1	1	1	–	–	–	–	1	–
Extraordinary Gains	–	–	–	–	–	–	– 1	–	–	–
Net Income	6	4	1	–	1	1	3	3	5	3

A22 Canadian Crude Oil Acquisition Costs vs. Petroleum Product Prices



During 1989 the difference between average refined product prices (excluding sales and excise taxes) and average refiner acquisition costs of crude oil ranged from a low of 9.2¢ to a high of 11.2¢ per litre. The corresponding 1988 figures were slightly lower with a range of 9.0¢ to 10.6¢ per litre.

A23 Canadian Ownership and Control by Company Group and Category

in percent

	Ownership		Control	
	1988	1989	1988	1989
Petroleum Related Revenues[a]				
Integrateds and Refiners	43.7	43.9	28.8	30.6
Oil and Gas Producers	46.2	47.7	50.6	51.5
Total Industry	**44.3**	**44.9**	**35.0**	**36.1**
Upstream Revenues				
Integrateds and Refiners	38.7	39.9	20.3	19.4
Oil and Gas Producers	43.7	45.2	45.8	48.8
Total Industry	**42.1**	**43.4**	**37.6**	**39.0**
Other Measurement Bases				
Revenues				
Natural Gas	46.5	46.2	43.5	44.2
Crude Oil	40.9	43.3	35.3	37.0
Downstream	45.7	45.8	33.4	34.4
Exploration Expenditures	**52.4**	**49.4**	**50.3**	**46.8**
Total Assets in Canada	**50.4**	**48.7**	**45.2**	**42.7**

Note:

(a) Many petroleum companies have operations in non petroleum-related fields which are not included here. Upstream plus downstream revenues have been taken as a substitute for a more specifically defined figure reflecting every aspect of the Canadian petroleum industry.

A24 'In-house' R&D Expenditures in millions of dollars

	1988			1989		
	Corporate Funds[a]	Government Funds	Total	Corporate Funds[a]	Government Funds	Total
Upstream						
Conventional Exploration and Production	37.7	0.2	37.9	52.7	0.1	52.8
Enhanced Recovery	6.2	0.2	6.4	6.4	–	6.4
Bitumen						
Surface Mining	1.0	–	1.0	9.7	2.2	11.9
In-Situ	46.0	3.4	49.4	19.1	3.5	22.6
Total Bitumen	47.0	3.4	50.4	28.8	5.8	34.6
Refining	**57.8**	**0.3**	**58.1**	**63.9**	**0.1**	**64.0**
Other						
Other Energy	28.5	1.3	29.8	22.6	1.0	23.6
Non Energy	6.7	0.2	6.9	5.3	0.2	5.5
Total Other	35.2	1.5	36.7	27.9	1.3	29.1
Total Expenditures	**183.9**	**5.6**	**189.5**	**179.7**	**7.2**	**186.9**

Note:
(a) Corporate funds are composed of internal funds, funds from subsidiaries and affiliates, and funds from others for contract work performed by the reporting energy enterprise.

Appendix B
Complete Survey Results

B1

Income and Expense Statement – All Operations in millions of dollars
Total Industry

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Revenues	15762	17171	8.9	26982	28790	6.7	2884	2755	-4.5	1372	1434	4.5	47000	50150	6.7
Royalties & other Payments	2537	2702	6.5	0	0	–	0	0	–	0	0	–	2537	2702	6.5
Sales, Excise & other Taxes	0	0	–	4251	4668	9.8	4	4	1.6	72	57	-21.1	4327	4729	9.3
Total Revenues after Royalties and Taxes	13225	14468	9.4	22731	24121	6.1	2880	2751	-4.5	1301	1378	5.9	40137	42718	6.4
Cost of Goods Sold	0	0	–	15653	17089	9.2	890	1214	36.5	343	273	-20.3	16886	18577	10.0
Interest Expenses	1406	1274	-9.4	76	303	297.3	554	922	66.4	33	37	13.4	2070	2537	22.6
Operating Costs	5792	6203	7.1	3771	4139	9.8	969	992	2.3	363	357	-1.6	10895	11691	7.3
R&D Costs (Excluding Oil Sands)	81	65	-20.0	86	98	13.9	1	1	9.5	1	9	–	169	173	2.1
Other Expenses	124	114	-8.5	7	-2	–	94	36	-61.6	40	5	-88.0	266	152	-42.7
Oil Sands R&D Expensed	37	42	13.0	0	0	–	0	0	–	0	0	–	37	42	13.0
E&D Expensed	1356	1071	-21.0	0	0	–	43	37	-13.1	160	111	-30.9	1559	1219	-21.8
Depreciation	1070	1167	9.0	761	807	6.1	217	145	-33.3	64	61	-4.4	2112	2180	3.2
Depletion	2138	2250	5.2	0	0	–	26	25	-3.3	381	253	-33.8	2545	2528	-0.7
Write-Offs & Amortization	543	664	22.4	21	30	47.1	-46	118	–	-28	45	–	489	857	75.1
Non-Cash Charges and E&D	5144	5193	1.0	782	838	7.2	240	325	35.5	578	469	-18.8	6743	6825	1.2
Income before Taxes	678	1618	138.8	2356	1657	-29.7	132	-740	–	-57	228	–	3109	2763	-11.1
Federal Income Tax(1)	187	405	116.7	578	426	-26.3	-6	-233	–	54	77	42.3	814	675	-17.1
Provincial Income Taxes	-162	-25	–	212	167	-21.6	-2	-130	–	0	1	–	49	12	-74.8
Current Income Taxes	25	380	–	791	593	-25.0	-8	-362	–	54	78	43.2	863	687	-20.4
Income after Current Income Taxes	653	1238	89.7	1566	1064	-32.0	139	-377	–	-111	150	–	2246	2076	-7.6
Deferred Income Taxes	95	437	360.0	136	72	-47.3	12	-67	–	-5	38	–	237	479	101.8
Net Income after Taxes	558	801	43.7	1430	992	-30.6	128	-310	–	-106	112	–	2009	1596	-20.6
Extraordinary Items	229	-177	–	49	-69	–	-3	-37	–	-106	9	–	170	-274	–
Net Income After Extraordinary Items	787	624	-20.7	1479	924	-37.6	125	-347	–	-212	120	–	2179	1321	-39.4
Internal Cash Flow	5796	6432	11.0	2347	1902	-19.0	379	-52	–	466	618	32.6	8989	8900	-1.0

(1) Includes Large Corporations Tax.

B2

Income and Expense Statement – All Operations in millions of dollars
Integrateds and Refiners

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Revenues	5053	5765	14.1	26412	28171	6.7	1575	1510	–4.1	238	218	–8.2	33278	35664	7.2
Royalties & other Payments	807	855	6.0	0	0	–	0	0	–	0	0	–	807	855	6.0
Sales, Excise & other Taxes	0	0	–	4251	4668	9.8	4	4	3.5	0	0	–	4255	4673	9.8
Total Revenues after Royalties and Taxes	4246	4910	15.6	22161	23502	6.1	1571	1506	–4.2	238	218	–8.2	28217	30136	6.8
Cost of Goods Sold	0	0	–	15482	16853	8.8	888	1154	29.9	154	115	–25.3	16525	18122	9.7
Interest Expenses	28	80	189.6	57	274	383.1	357	774	116.8	0	0	–	442	1129	155.5
Operating Costs	2097	2259	7.7	3574	3926	9.9	225	252	11.9	26	25	–4.9	5922	6462	9.1
R&D Costs (Excluding Oil Sands)	37	48	29.1	86	98	13.9	1	0	–43.6	0	0	–	124	147	18.1
Other Expenses	1	13	–	7	–3	–	25	6	–75.8	1	0	–79.8	33	16	–51.1
Oil Sands R&D Expensed	16	19	15.4	0	0	–	0	0	–	0	0	–	16	19	15.4
E&D Expensed	464	325	–29.9	0	0	–	26	18	–31.6	100	38	–61.7	590	381	–35.4
Depreciation	336	385	14.7	705	747	5.9	75	56	–25.0	2	2	–29.6	1118	1190	6.4
Depletion	359	363	1.3	0	0	–	5	1	–79.0	17	13	–19.0	380	378	–0.6
Write–Offs & Amortization	329	313	–4.7	24	31	28.8	–27	–50	–	1	7	–	327	301	–7.9
Non–Cash Charges and E&D	1503	1406	–6.5	729	778	6.7	79	25	–67.9	120	60	–50.1	2432	2269	–6.7
Income before Taxes	580	1103	90.3	2227	1577	–29.2	–4	–706	–	–64	18	–	2739	1992	–27.3
Federal Income Tax(1)	85	277	225.8	562	431	–23.2	–56	–255	–	7	7	2.7	597	459	–23.1
Provincial Income Taxes	–8	117	–	204	161	–21.4	–22	–131	–	0	0	–	175	147	–16.0
Current Income Taxes	77	394	–	766	592	–22.7	–78	–387	–	7	7	0.8	772	606	–21.5
Income after Current Income Taxes	503	709	41.0	1461	985	–32.5	74	–320	–	–71	10	–	1967	1386	–29.5
Deferred Income Taxes	112	87	–21.9	133	50	–62.1	12	4	–65.7	5	–2	–	263	140	–46.7
Net Income after Taxes	391	622	59.1	1327	935	–29.6	62	–324	–	–76	12	–	1704	1245	–26.9
Extraordinary Items	–39	0	–	29	–69	–	–43	–54	–	0	0	–	–53	–122	–
Net Income After Extraordinary Items	352	622	76.7	1356	866	–36.1	19	–378	–	–76	12	–	1651	1123	–32.0
Internal Cash Flow	2006	2115	5.4	2190	1763	–19.5	153	–294	–	49	70	43.2	4398	3654	–16.9

(1) Includes Large Corporations Tax.

B3

Income and Expense Statement – All Operations in millions of dollars
Junior Oil and Gas Producers

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Revenues	3075	3516	14.3	54	40	-25.0	536	413	-22.9	524	480	-8.3	4188	4449	6.2
Royalties & other Payments	545	606	11.3	0	0	–	0	0	–	0	0	–	545	606	11.3
Sales, Excise & other Taxes	0	0	–	0	0	–	0	0	–	44	32	-28.5	44	32	-28.3
Total Revenues after Royalties and Taxes	2530	2910	15.0	54	40	-25.3	536	413	-22.9	479	449	-6.4	3599	3812	5.9
Cost of Goods Sold	0	0	–	0	0	–	1	3	201.1	0	0	–	1	3	201.1
Interest Expenses	420	417	-0.5	5	3	-37.1	73	65	-11.0	14	8	-45.0	511	493	-3.6
Operating Costs	997	1112	11.5	13	29	122.2	298	241	-19.0	216	161	-25.4	1524	1544	1.3
R&D Costs (Excluding Oil Sands)	0	0	–	0	0	–	0	0	–	1	0	-100.0	1	0	-87.8
Other Expenses	89	88	-1.0	1	1	-10.2	47	15	-67.5	18	6	-67.8	155	110	-29.0
Oil Sands R&D Expensed	2	2	-16.8	0	0	–	0	0	–	0	0	–	2	2	-16.8
E&D Expensed	87	116	33.0	0	0	–	0	0	–	2	1	-67.5	89	116	30.8
Depreciation	181	190	4.6	5	6	5.1	31	30	-4.9	20	14	-28.8	238	239	0.6
Depletion	818	959	17.3	0	0	–	12	10	-16.1	153	106	-30.9	983	1075	9.4
Write-Offs & Amortization	93	66	-28.8	-1	1	–	14	12	-14.5	12	35	195.4	118	114	-3.3
Non-Cash Charges and E&D	1181	1332	12.8	5	7	43.7	57	52	-9.6	187	155	-16.8	1429	1546	8.1
Income before Taxes	-156	-40	–	30	0	-99.3	60	37	-37.9	44	119	168.0	-22	117	–
Federal Income Tax(1)	12	46	285.6	0	0	–	14	19	38.5	15	35	136.4	40	99	147.8
Provincial Income Taxes	-149	-134	–	0	0	–	0	1	–	0	0	–	-149	-133	–
Current Income Taxes	-137	-88	–	0	0	–	14	19	41.0	15	35	137.2	-109	-34	–
Income after Current Income Taxes	-19	48	–	30	0	-100.0	46	18	-61.1	30	84	183.1	87	150	73.1
Deferred Income Taxes	-16	37	–	0	0	–	9	-20	–	-8	5	–	-14	22	–
Net Income after Taxes	-3	11	–	30	0	-100.0	37	38	3.8	37	79	110.8	101	128	27.1
Extraordinary Items	390	-219	–	21	0	-100.0	5	-1	–	-106	11	–	309	-210	–
Net Income After Extraordinary Items	387	-208	–	50	0	-100.0	42	37	-11.5	-69	90	–	410	-81	–
Internal Cash Flow	1161	1380	18.8	34	7	-81.1	104	70	-32.7	217	240	10.6	1516	1696	11.9

(1) Includes Large Corporations Tax.

B4

Income and Expense Statement – All Operations in millions of dollars
Senior Oil and Gas Producers

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Revenues	7634	7890	3.3	516	579	12.2	773	832	7.6	611	736	20.4	9534	10036	5.3
Royalties & other Payments	1185	1241	4.7	0	0	–	0	0	–	0	0	–	1185	1241	4.7
Sales, Excise & other Taxes	0	0	–	0	0	–	0	0	–	28	25	-9.4	28	25	-9.4
Total Revenues after Royalties and Taxes	6449	6649	3.1	516	579	12.2	773	832	7.6	583	711	21.9	8321	8771	5.4
Cost of Goods Sold	0	0	–	170	236	38.7	1	58	–	189	158	-16.3	360	452	25.5
Interest Expenses	959	777	-19.0	14	26	84.2	124	83	-33.2	19	30	54.1	1117	916	-18.0
Operating Costs	2698	2832	5.0	184	183	-0.2	446	498	11.8	121	171	41.5	3449	3685	6.9
R&D Costs (Excluding Oil Sands)	44	17	-62.0	0	0	–	0	1	–	0	9	–	44	26	-40.9
Other Expenses	34	12	-63.3	0	0	–	23	15	-34.1	21	-1	–	78	26	-66.2
Oil Sands R&D Expensed	19	21	13.9	0	0	–	0	0	–	0	0	–	19	21	13.9
E&D Expensed	805	630	-21.8	0	0	–	17	19	15.9	58	72	23.1	880	721	-18.1
Depreciation	553	592	7.1	50	55	9.4	111	59	-46.9	41	45	8.7	756	751	-0.6
Depletion	961	928	-3.5	0	0	–	9	14	51.7	212	133	-37.0	1182	1075	-9.1
Write-Offs & Amortization	121	285	134.7	-3	-2	–	-33	155	–	-41	3	–	44	442	–
Non-Cash Charges and E&D	2460	2456	-0.2	48	53	12.0	104	248	138.9	271	254	-6.4	2882	3011	4.5
Income before Taxes	254	555	118.1	100	79	-20.3	76	-71	–	-38	91	–	392	655	66.9
Federal Income Tax(1)	90	82	-8.7	17	-5	–	37	4	-88.7	32	35	8.8	176	116	-34.1
Provincial Income Taxes	-5	-8	–	8	6	-27.2	20	1	-96.2	0	1	–	23	-1	–
Current Income Taxes	85	74	-13.3	24	1	-97.1	57	5	-91.3	33	36	10.6	199	115	-42.3
Income after Current Income Taxes	169	481	184.6	75	79	4.6	19	-76	–	-70	55	–	193	540	179.9
Deferred Income Taxes	-1	312	–	3	21	–	-10	-51	–	-3	34	–	-11	317	–
Net Income after Taxes	170	169	-0.9	73	58	-20.9	28	-25	–	-67	21	–	204	222	8.8
Extraordinary Items	-122	42	–	0	0	–	35	18	-47.7	0	-2	–	-86	58	–
Net Income After Extraordinary Items	49	210	332.9	73	58	-20.9	64	-6	–	-67	18	–	118	280	137.8
Internal Cash Flow	2629	2937	11.7	123	132	7.5	123	172	40.8	201	309	53.7	3075	3550	15.5

(1) Includes Large Corporations Tax.

B5

Income and Expense Statement – All Operations in millions of dollars
Total Oil and Gas Producers

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Revenues	10709	11406	6.5	569	619	8.7	1309	1245	-4.9	1135	1216	7.2	13722	14486	5.6
Royalties & other Payments	1730	1847	6.8	0	0	–	0	0	–	0	0	–	1730	1847	6 8
Sales, Excise & other Taxes	0	0	–	0	0	–	0	0	–	72	57	-21.1	72	57	-21.0
Total Revenues after Royalties and Taxes	8979	9559	6.5	570	619	8.7	1309	1245	-4.9	1063	1160	9.1	11920	12582	5.6
Cost of Goods Sold	0	0	–	170	236	38.7	2	61	–	189	158	-16.3	361	455	26.0
Interest Expenses	1378	1194	-13.4	20	30	50.8	197	148	-25.0	33	37	12.9	1628	1409	-13.5
Operating Costs	3695	3944	6.7	197	213	8.0	744	740	0.5	337	332	-1.3	4972	5229	5.2
R&D Costs (Excluding Oil Sands)	44	17	-61.8	0	0	–	0	1	–	1	9	–	45	26	-42.0
Other Expenses	123	101	-18.2	1	1	-10.2	70	30	-56.6	39	5	-88.1	233	136	-41.5
Oil Sands R&D Expensed	21	23	11.1	0	0	–	0	0	–	0	0	–	21	23	11.1
E&D Expensed	892	746	-16.4	0	0	–	17	19	15.9	60	73	20.2	969	838	-13.6
Depreciation	734	782	6.4	56	61	9.0	142	89	-37.7	61	59	-3.4	994	990	-0.3
Depletion	1779	1887	6.0	0	0	–	21	24	14.1	365	239	-34.4	2165	2150	-0.7
Write-Offs & Amortization	214	351	64.0	-4	-1	–	-19	168	–	-29	38	–	162	556	242.3
Non-Cash Charges and E&D	3640	3788	4.1	52	60	14.9	161	300	86.2	458	409	-10.6	4311	4557	5.7
Income before Taxes	98	515	–	130	80	-38.6	136	-34	–	7	210	–	370	771	108.2
Federal Income Tax(1)	102	128	25.7	17	-5	–	50	23	-54.7	47	70	48.4	216	216	-0.3
Provincial Income Taxes	-154	-142	–	8	6	-26.2	20	1	-93.5	0	1	–	-125	-134	–
Current Income Taxes	-52	-14	–	25	1	-95.5	71	24	-65.8	47	71	49.8	91	81	-10.5
Income after Current Income Taxes	150	529	253.1	105	78	-25.3	65	-58	–	-40	139	–	280	690	146.7
Deferred Income Taxes	-17	349	–	3	21	–	0	-72	–	-10	40	–	-25	339	–
Net Income after Taxes	167	180	7.7	102	57	-44.1	65	14	-78.9	-30	100	–	305	350	14.9
Extraordinary Items	268	-177	–	21	0	-100.0	40	17	-57.5	-106	9	–	223	-152	–
Net Income After Extraordinary Items	435	2	-99.4	123	57	-53.5	105	31	-70.8	-136	108	–	528	199	-62.4
Internal Cash Flow	3790	4317	13.9	157	138	-12.0	226	242	7.1	417	548	31.4	4591	5246	14.3

(1) Includes Large Corporations Tax.

B6

Income and Expense Statement – All Operations in millions of dollars
Canadian-Controlled Companies

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Revenues	5906	6629	12.2	9014	9890	9.7	1997	1844	-7.7	488	517	5.8	17406	18879	8.5
Royalties & other Payments	895	964	7.8	0	0	–	0	0	–	0	0	–	895	964	7.8
Sales, Excise & other Taxes	0	0	–	1364	1488	9.1	4	4	4.3	1	0	-67.1	1369	1493	9.0
Total Revenues after Royalties and Taxes	5011	5664	13.0	7650	8402	9.8	1993	1840	-7.7	488	517	5.9	15142	16422	8.5
Cost of Goods Sold	0	0	–	5218	5900	13.1	955	1086	13.8	0	0	–	6172	6986	13.2
Interest Expenses	535	575	7.5	36	202	–	238	296	24.5	24	15	-36.2	832	1089	30.8
Operating Costs	2187	2401	9.8	1284	1449	12.8	558	473	-15.1	209	150	-28.5	4237	4473	5.6
R&D Costs (Excluding Oil Sands)	4	2	-63.5	0	0	–	0	0	–	1	0	-100.0	5	2	-70.2
Other Expenses	60	48	-19.8	13	3	-74.7	53	17	-68.0	19	12	-34.9	145	80	-44.4
Oil Sands R&D Expensed	2	4	98.2	0	0	–	0	0	–	0	0	–	2	4	98.2
E&D Expensed	331	241	-27.4	0	0	–	6	10	54.9	145	89	-38.4	483	340	-29.6
Depreciation	421	531	26.2	306	344	12.4	69	56	-19.1	53	54	1.3	850	985	16.0
Depletion	1134	1199	5.7	0	0	–	15	19	23.9	157	130	-17.3	1306	1348	3.2
Write-Offs & Amortization	195	59	-69.6	12	10	-19.8	-1	1	–	10	28	181.3	217	99	-54.5
Non-Cash Charges and E&D	2084	2034	-2.4	319	354	11.2	90	86	-4.9	365	301	-17.5	2857	2775	-2.9
Income before Taxes	142	604	325.1	781	494	-36.8	100	-119	–	-130	38	–	892	1017	14.0
Federal Income Tax(1)	18	164	–	168	124	-26.2	11	-82	–	19	45	136.5	216	250	16.0
Provincial Income Taxes	-115	-70	–	36	34	-5.4	-1	-39	–	0	1	–	-81	-74	–
Current Income Taxes	-98	93	–	205	158	-22.5	9	-121	–	19	45	138.0	135	177	30.5
Income after Current Income Taxes	240	510	113.0	576	335	-41.8	91	2	-97.8	-149	-7	–	757	840	11.0
Deferred Income Taxes	-20	98	–	94	44	-53.6	4	24	–	-9	-2	–	68	163	139.0
Net Income after Taxes	260	413	58.6	482	292	-39.5	86	-22	–	-140	-5	–	689	677	-1.7
Extraordinary Items	386	-185	–	33	0	-100.0	-1	-41	–	-106	9	–	312	-217	–
Net Income After Extraordinary Items	646	227	-64.8	516	292	-43.4	85	-63	–	-246	4	–	1001	460	-54.1
Internal Cash Flow	2323	2545	9.5	895	689	-23.0	181	88	-51.5	216	294	36.3	3614	3616	–

(1) Includes Large Corporations Tax.

B7

Income and Expense Statement – All Operations in millions of dollars
Foreign-Controlled Companies

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Revenues	9856	10542	7.0	17968	18900	5.2	887	911	2.7	884	918	3.8	29594	31271	5.7
Royalties & other Payments	1642	1738	5.9	0	0	–	0	0	–	0	0	–	1642	1738	5.9
Sales, Excise & other Taxes	0	0	–	2886	3180	10.2	0	0	–	71	56	-20.8	2958	3237	9.4
Total Revenues after Royalties and Taxes	8214	8804	7.2	15081	15720	4.2	887	911	2.7	813	861	6.0	24995	26296	5.2
Cost of Goods Sold	0	0	–	10435	11189	7.2	-65	128	–	343	273	-20.3	10713	11590	8.2
Interest Expenses	871	699	-19.8	41	102	149.1	316	626	97.9	9	22	144.3	1237	1449	17.1
Operating Costs	3605	3802	5.4	2487	2690	8.2	412	519	26.0	154	208	35.0	6657	7217	8.4
R&D Costs (Excluding Oil Sands)	77	64	-17.5	86	98	13.9	1	1	25.0	0	9	–	164	171	4.5
Other Expenses	64	66	2.0	-6	-6	–	42	19	-53.5	21	-8	–	121	72	-40.6
Oil Sands R&D Expensed	35	38	8.6	0	0	–	0	0	–	0	0	–	35	38	8.6
E&D Expensed	1025	830	-19.0	0	0	–	37	27	-25.0	15	22	40.1	1077	879	-18.3
Depreciation	649	636	-2.1	455	463	1.9	148	89	-40.0	10	7	-33.7	1262	1194	-5.4
Depletion	1004	1050	4.7	0	0	–	11	6	-41.2	225	123	-45.3	1239	1180	-4.8
Write-Offs & Amortization	348	605	74.0	8	21	145.0	-46	117	–	-38	16	–	273	758	178.2
Non-Cash Charges and E&D	3060	3159	3.2	463	484	4.5	150	240	59.8	213	168	-21.2	3885	4050	4.2
Income before Taxes	536	1015	89.4	1576	1163	-26.2	32	-621	–	74	190	157.9	2217	1746	-21.2
Federal Income Tax(1)	169	242	42.9	410	302	-26.3	-17	-150	–	35	33	-7.8	598	424	-29.0
Provincial Income Taxes	-46	45	–	176	132	-24.9	0	-91	–	0	0	–	130	86	-33.4
Current Income Taxes	123	287	133.4	586	434	-25.9	-17	-242	–	35	33	-7.6	727	511	-29.8
Income after Current Income Taxes	413	728	76.2	990	729	-26.4	49	-379	–	38	157	312.2	1489	1236	-17.0
Deferred Income Taxes	115	339	193.5	42	28	-33.2	7	-92	–	4	40	–	169	316	86.7
Net Income after Taxes	297	389	30.7	947	701	-26.0	41	-288	–	34	117	244.3	1320	918	-30.4
Extraordinary Items	-157	8	–	16	-69	–	-2	4	–	0	0	–	-142	-57	–
Net Income After Extraordinary Items	141	397	181.6	963	632	-34.4	40	-284	–	34	117	244.3	1178	862	-26.8
Internal Cash Flow	3473	3887	11.9	1453	1212	-16.5	199	-140	–	251	324	29.4	5375	5284	-1.7

(1) Includes Large Corporations Tax.

B8

Financial Performance for Main Business Segments

Upstream Operations

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Production of Oil Equivalent[1] in thousands of cubic metres	180676	182352	0.9	70491	73160	3.8	110184	109192	-0.9
Key Financial Items in millions of dollars			%			%			%
Sales before Royalties and Taxes	14857	16469	10.8	5478	6230	13.7	9379	10238	9.2
Other Revenues	905	702	-22.4	428	398	-6.9	477	304	-36.3
Gross Revenues	15762	17171	8.9	5906	6629	12.2	9856	10542	7.0
Internal Cash Flow	5796	6432	11.0	2323	2545	9.5	3473	3887	11.9
Net Income	558	801	43.7	2[illegible]J	413	58.6	297	389	30.7
Net Income plus Interest	1964	2076	5.7	795	988	24.2	1169	1088	-6.9
Capital Employed	52168	52886	1.4	22618	22776	0.7	29549	30110	1.9
Unit Revenues and Costs in dollars per cubic metre			%			%			%
Sales before Royalties and Taxes	82.23	90.31	9.8	77.71	85.16	9.6	85.12	93.76	10.2
Other Revenues	5.01	3.85	-23.1	6.07	5.44	-10.3	4.33	2.78	-35.7
Gross Revenues	87.24	94.16	7.9	83.79	90.61	8.1	89.45	96.55	7.9
Royalties & Other Payments	14.04	14.82	5.5	12.70	13.18	3.8	14.90	15.92	6.8
Revenues after Royalties & Taxes	73.20	79.34	8.4	71.09	77.42	8.9	74.55	80.63	8.2
Interest Expenses	7.78	6.99	-10.2	7.59	7.87	3.6	7.91	6.40	-19.0
Operating Costs (excluding Research)	32.06	34.02	6.1	31.02	32.82	5.8	32.72	34.82	6.4
Research & Other Expenses	1.14	0.98	-13.8	0.91	0.67	-25.6	1.28	1.18	-7.8
Cash Income before Taxes	32.22	37.36	15.9	31.57	36.06	14.2	32.63	38.23	17.1
E&D & Oil Sands R&D Expensed	7.71	6.10	-20.9	4.73	3.34	-29.4	9.62	7.95	-17.3
Depreciation	5.92	6.40	8.0	5.97	7.26	21.6	5.89	5.82	-1.2
Depletion	11.83	12.34	4.3	16.09	16.39	1.9	9.11	9.62	5.6
Write-offs	3.00	3.64	21.2	2.77	0.81	-70.7	3.16	5.54	75.5
Net Income before Taxes	3.75	8.86	136.6	2.02	8.25	309.6	4.86	9.29	91.1
Federal Income Tax[2]	1.04	2.22	114.7	0.25	2.24	-	1.54	2.21	44.2
Provincial Income Taxes	-0.90	-0.14	-	-1.64	-0.96	-	-0.42	0.41	-
Deferred Income Taxes	0.53	2.40	355.7	-0.29	1.34	-	1.05	3.10	196.2
Net Income after Taxes	3.09	4.39	42.4	3.69	5.64	52.8	2.70	3.56	31.9
Extraordinary Items	1.27	-0.97	-	5.48	-2.53	-	-1.42	0.07	-
Net Income after Extraordinary Items	4.36	3.42	-21.5	9.17	3.11	-66.1	1.28	3.63	184.2
Internal Cash Flow	32.08	35.27	9.9	32.96	34.78	5.5	31.52	35.60	12.9
Ratios in percent									
Natural Gas as a percent of Total Production	44.5	46.4	N/A	50.2	51.5	N/A	40.8	43.0	N/A

(1) Does not include sulphur.
(2) Includes Large Corporations Tax.

B8(continued)

Financial Performance for Main Business Segments

Upstream Operations

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Production of Oil Equivalent[1] in thousands of cubic metres	58380	59645	2.2	39877	42658	7.0	82418	80049	-2.9
Key Financial Items in millions of dollars			%			%			%
Sales before Royalties and Taxes	4966	5652	13.8	2842	3307	16.4	7048	7509	6.5
Other Revenues	97	113	30.5	232	208	-10.3	586	381	-35.0
Gross Revenues	5063	5765	14.1	3075	3516	14.3	7634	7890	3.3
Internal Cash Flow	2006	2115	5.4	1161	1380	18.8	2629	2937	11.7
Net Income	391	622	59.1	-3	11	–	170	169	-0.9
Net Income plus Interest	418	702	67.8	416	428	2.9	1129	945	-16.3
Capital Employed	14568	15948	9.5	14839	14121	-4.8	22760	22816	0.2
Unit Revenues and Costs in dollars per cubic metre			%			%			%
Sales before Royalties and Taxes	85.07	94.76	11.4	71.28	77.53	8.8	85.52	93.81	9.7
Other Revenues	1.48	1.89	27.8	5.83	4.89	-16.1	7.11	4.76	-33.1
Gross Revenues	86.55	96.66	11.7	77.11	82.42	6.9	92.63	98.56	6.4
Royalties & Other Payments	13.82	14.34	3.8	13.66	14.21	4.0	14.38	15.50	7.8
Revenues after Royalties & Taxes	72.74	82.32	13.2	63.44	68.21	7.5	78.25	83.06	6.2
Interest Expenses	0.48	1.35	183.5	10.52	9.78	-7.0	11.63	9.70	-16.6
Operating Costs (excluding Research)	35.92	37.88	5.4	25.00	26.06	4.3	32.73	35.38	8.1
Research & Other Expenses	0.66	1.03	55.5	2.24	2.07	-7.4	0.94	0.36	-61.4
Cash Income before Taxes	35.68	42.06	17.9	25.69	30.29	17.9	32.93	37.61	14.2
E&D & Oil Sands R&D Expensed	8.22	5.76	-29.9	2.23	2.75	23.4	10.00	8.14	-18.6
Depreciation	5.75	6.46	12.3	4.55	4.45	-2.3	6.71	7.39	10.2
Depletion	6.14	6.09	-0.9	20.51	22.48	9.6	11.67	11.59	-0.7
Write-offs	5.83	5.25	-6.7	2.32	1.55	-33.4	1.47	3.56	141.6
Net Income before Taxes	9.93	18.50	86.3	-3.92	-0.93	–	3.09	6.93	124.6
Federal Income Tax[2]	1.46	4.64	218.9	0.30	1.08	260.5	1.09	1.03	-5.9
Provincial Income Taxes	-0.14	1.96	–	-3.74	-3.14	–	-0.06	-0.10	–
Deferred Income Taxes	1.92	1.47	-23.6	-0.39	0.87	–	-0.02	3.90	–
Net Income after Taxes	6.69	10.42	55.7	-0.08	0.26	–	2.07	2.11	2.0
Extraordinary Items	-0.67	0.00	–	9.78	-5.14	–	-1.48	0.52	–
Net Income after Extraordinary Items	6.02	10.42	73.0	9.70	-4.88	–	0.59	2.63	345.8
Internal Cash Flow	34.36	35.45	3.2	29.13	32.35	11.1	31.90	36.69	15.0
Ratios in percent									
Natural Gas as a percent of Total Production	31.9	35.7	N/A	61.0	62.2	N/A	45.4	46.1	N/A

(1) Does not include sulphur.

(2) Includes Large Corporations Tax.

B9

Financial Performance for Main Business Segments
Downstream Operations

	Total Downstream			Total Oil Products			Petrochemicals and Other		
	1988	1989	Change	1988	1989	Change	1988	1989	Change
Key Financial Items in millions of dollars			%			%			%
Revenues before Sales, Excise & other Taxes	26281	27966	6.4	22701	24814	9.3	3580	3152	-11.9
Other Revenues	701	824	17.5	698	772	10.6	2	51	-
Total Revenues	26982	28790	6.7	23400	25587	9.3	3582	3203	-10.6
Sales, Excise & other Taxes	4251	4668	9.8	4250	4667	9.8	1	2	97.9
Cost of Goods Sold	15653	17089	9.2	13647	15192	11.3	2005	1897	-5.4
Operating Costs	3771	4139	9.8	3346	3686	10.1	425	453	6.7
R&D Costs (excluding Oil Sands)	86	98	13.9	52	64	22.4	34	34	0.7
Other Expenses	7	-2	-	7	-3	-	0	1	-
Cash Income before Interest and Taxes	3214	2798	-12.9	2097	1981	-5.5	1117	817	-26.9
Interest Expenses	76	303	297.3	56	220	293.2	20	84	308.7
Cash Income before Taxes	3138	2495	-20.5	2041	1761	-13.7	1097	733	-33.2
Current Income Taxes	791	593	-25.0	496	450	-9.3	295	143	-51.5
Internal Cash Flow	2347	1902	-19.0	1545	1312	-15.1	802	590	-26.4
Depreciation & other Non-cash Charges	782	838	7.2	583	640	9.7	198	198	-0.2
Income after Current Income Taxes	1566	1064	-32.0	962	672	-30.2	604	392	-35.0
Deferred Income Taxes	136	72	-47.3	87	19	-78.1	49	53	8.3
Net Income after Taxes	1430	992	-30.6	875	653	-25.4	555	340	-38.8
Extraordinary Items	49	-69	-	29	-69	-	21	0	-100.0
Net Income after Extraordinary Items	1479	924	-37.6	903	584	-35.3	576	340	-41.0

	Total Oil Products[1]			National Refiners-Marketers			Regional Refiners-Marketers		
	1988	1989	Change	1988	1989	Change	1988	1989	Change
Unit Revenues and Costs in dollars per cubic metre			%			%			%
Revenues before Sales, Excise & other Taxes	265.62	279.42	5.2	270.48	284.34	5.1	254.33	268.86	5.7
Other Revenues	8.17	8.70	6.4	8.88	9.70	9.2	6.52	6.55	0.5
Total Revenues	273.80	288.12	5.2	279.36	294.03	5.3	260.85	275.42	5.6
Sales, Excise & other Taxes	49.73	52.55	5.7	51.34	55.34	7.8	45.97	46.57	1.3
Cost of Goods Sold	159.69	171.07	7.1	162.27	171.23	5.5	153.68	170.71	11.1
Operating Costs	39.15	41.50	6.0	43.10	46.54	8.0	29.96	30.69	2.4
R&D Costs (excluding Oil Sands)	0.61	0.72	17.8	0.83	1.00	20.5	0.11	0.13	16.5
Other Expenses	0.09	-0.03	-	-0.13	-0.09	-	0.58	0.10	-83.0
Cash Income before Interest and Taxes	24.53	22.31	-9.1	21.94	20.02	-8.8	30.56	27.22	-10.9
Interest Expenses	0.65	2.47	278.4	0.01	0.01	-0.8	2.16	7.77	259.6
Cash Income before Taxes	23.88	19.83	-16.9	21.94	20.01	-8.8	28.40	19.45	-31.5
Current Income Taxes	5.80	5.06	-12.7	6.38	5.98	-6.3	4.44	3.09	-30.3
Internal Cash Flow	18.08	14.77	-18.3	15.55	14.03	-9.8	23.96	16.35	-31.8
Depreciation & other Non-cash Charges	6.82	7.20	5.6	6.54	6.76	3.4	7.49	8.16	9.0
Income after Current Income Taxes	11.26	7.57	-32.8	9.01	7.27	-19.3	16.48	8.20	-50.3
Deferred Income Taxes	1.02	0.22	-79.0	0.17	-0.35	-	3.01	1.44	-52.2
Net Income after Taxes	10.23	7.35	-28.2	8.84	7.63	-13.8	13.47	6.76	-49.8
Extraordinary Items	0.34	-0.77	-	0.00	0.00	-	1.12	-2.43	-
Net Income after Extraordinary Items	10.57	6.58	-37.8	8.84	7.63	-13.8	14.59	4.33	-70.3
Ratios in percent			Change			Change			Change
'Clean Products' Sales as a percent of Total Sales Volume	81.13	80.89	-0.3	81.41	81.25	-0.2	80.48	79.85	-0.8
Net Sales in Canada as a percent of Total Sales Volume	92.78	91.55	-1.3	94.32	93.63	-0.7	89.20	87.08	-2.4
Export Sales as a percent of Total Sales Volume	6.58	7.12	8.1	5.30	5.27	-0.5	9.58	11.09	15.7

(1) The calculation of unit revenues and costs is based on total sales volume data for the aggregates mentioned.

B10

Sources and Uses of Funds in millions of dollars

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Internal Cash Flow	8989	8900	-1.0	3614	3616	-	5375	5284	-1.7
Net Increase in Long-term Debt	2251	5185	130.4	1530	1392	-9.0	721	3793	-
Issue of Shares	2356	2837	20.4	1245	1336	7.3	1112	1502	35.1
Incentive Grants	420	198	-52.8	212	92	-56.4	208	106	-49.2
All Other Sources	4508	4228	-6.2	2148	2270	5.7	2360	1958	-17.0
Working Capital Decrease	4801	1635	-65.9	2706	725	-73.2	2095	911	-56.5
Total Sources of Funds	23324	22985	-1.5	11454	9432	-17.7	11870	13553	14.2
Total Capital Expenditures in Canada	8530	7185	-15.8	3870	3139	-18.9	4660	4046	-13.2
Capital Expenditure in U.S.A.	144	130	-9.6	115	98	-14.8	29	32	11.3
Other Foreign Capital Expenditures	468	404	-13.7	325	286	-11.8	144	118	-17.9
Total Foreign Capital Expenditures	612	534	-12.7	440	384	-12.6	172	150	-13.1
Total Company Capital Expenditures	9142	7719	-15.6	4309	3523	-18.2	4832	4196	-13.2
Dividends:									
Common Shares	2041	1083	-46.9	614	318	-48.3	1427	766	-46.3
Preferred Shares	425	286	-32.7	371	247	-33.4	54	39	-28.2
Total	2466	1369	-44.5	985	565	-42.7	1481	805	-45.7
Reduction of Equity	1414	858	-39.3	946	663	-29.9	468	195	-58.4
Total Dividend & Equity Reduction	3880	2227	-42.6	1931	1228	-36.4	1949	999	-48.7
Net Decrease in Long-term Debt	2681	2102	-21.6	1468	722	-50.8	1214	1380	13.7
All Other Applications	6150	9430	53.3	3077	2911	-5.4	3074	6520	112.1
Working Capital Increase	1471	1506	2.4	670	1048	56.5	801	458	-42.8
Total Applications of Funds	23324	22985	-1.5	11454	9432	-17.7	11870	13553	14.2

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Internal Cash Flow	4398	3654	-16.9	1516	1696	11.9	3075	3550	15.5
Net Increase in Long-term Debt	931	3833	311.8	522	754	44.4	798	598	-25.0
Issue of Shares	585	1405	139.9	1361	1148	-15.6	410	284	-30.6
Incentive Grants	93	25	-73.0	187	87	-53.4	139	86	-38.6
All Other Sources	474	1244	162.4	1907	1584	-16.9	2126	1399	-34.2
Working Capital Decrease	2200	791	-64.0	481	557	15.8	2120	287	-86.5
Total Sources of Funds	8681	10952	26.2	5974	5828	-2.4	8669	6204	-28.4
Total Capital Expenditures in Canada	3493	2973	-14.9	2020	1795	-11.2	3016	2417	-19.9
Capital Expenditure in U.S.A.	0	5	-	17	34	99.1	126	91	-27.7
Other Foreign Capital Expenditures	49	71	44.9	242	180	-25.9	177	154	-13.2
Total Foreign Capital Expenditures	49	76	53.2	259	213	-17.7	304	245	-19.2
Total Company Capital Expenditures	3543	3048	-14.0	2279	2008	-11.9	3320	2663	-19.8
Dividends:									
Common Shares	1680	687	-59.1	57	77	35.1	303	319	5.2
Preferred Shares	47	84	79.8	183	85	-53.6	196	117	-40.0
Total	1727	771	-55.4	240	162	-32.5	499	436	-12.5
Reduction of Equity	1032	544	-47.3	41	165	304.9	341	149	-56.4
Total Dividend & Equity Reduction	2758	1314	-52.4	281	328	16.5	840	585	-30.3
Net Decrease in Long-term Debt	227	468	106.4	1119	698	-37.6	1336	937	-29.9
All Other Applications	1655	5668	242.6	1658	2376	43.3	2838	1387	-51.1
Working Capital Increase	499	454	-9.0	637	419	-34.2	335	633	89.1
Total Applications of Funds	8681	10952	26.2	5974	5828	-2.4	8669	6204	-28.4

B11

Upstream Canadian Capital Expenditures by Location in millions of dollars

	Total Canadian			Provinces			Canada Lands		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Total Industry									
Land & Lease, Geological & Geophysical	1459	1244	-14.7	1377	1147	-16.7	82	97	18.6
Exploration Drilling	1537	1198	-22.0	1115	883	-20.8	422	315	-25.3
Total Exploration	2996	2442	-18.5	2492	2030	-18.6	504	412	-18.2
Development Drilling	1277	775	-39.3	1265	773	-38.9	12	1	-89.2
Production	1666	1887	13.3	1640	1856	13.2	26	31	20.7
Non-conventional Heavy Oil & Oil Sands	846	304	-64.1	846	304	-64.1	0	0	-
Total Upstream	6785	5408	-20.3	6243	4963	-20.5	542	445	-17.9
Canadian-Controlled Companies									
Land & Lease, Geological & Geophysical	657	551	-16.1	650	546	-16.0	7	5	-27.7
Exploration Drilling	849	580	-31.6	619	494	-20.3	229	87	-62.2
Total Exploration	1506	1132	-24.8	1270	1040	-18.1	236	91	-61.2
Development Drilling	562	434	-22.9	562	433	-23.0	0	1	-
Production	703	733	4.2	689	707	2.6	14	26	83.0
Non-conventional Heavy Oil & Oil Sands	245	105	-57.0	245	105	-57.0	0	0	-
Total Upstream	3016	2403	-20.3	2766	2285	-17.4	250	118	-52.9
Foreign-Controlled Companies									
Land & Lease, Geological & Geophysical	802	693	-13.6	727	600	-17.4	75	92	22.6
Exploration Drilling	688	618	-10.3	496	389	-21.5	193	228	18.6
Total Exploration	1490	1310	-12.1	1222	990	-19.0	268	321	19.7
Development Drilling	715	341	-52.3	703	340	-51.6	12	1	-93.7
Production	963	1155	20.0	951	1149	20.9	12	6	-52.2
Non-conventional Heavy Oil & Oil Sands	601	199	-66.9	601	199	-66.9	0	0	-
Total Upstream	3769	3005	-20.3	3477	2678	-23.0	292	327	12.1

B12

Capital Expenditures by Activity in millions of dollars

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Exploration	2996	2442	-18.5	1506	1132	-24.8	1490	1310	-12.1
Development	1277	775	-39.3	562	434	-22.9	715	341	-52.3
Production	1666	1887	13.3	703	733	4.2	963	1155	20.0
Oil Sands	846	304	-64.1	245	105	-57.0	601	199	-66.9
Total Upstream	6785	5408	-20.3	3016	2403	-20.3	3769	3005	-20.3
Total Downstream	1328	1274	-4.1	700	532	-23.9	628	742	18.1
Uranium	0	1	-	0	0	-	0	1	-
Coal	15	16	2.2	6	1	-78.0	9	14	60.3
All Others	402	486	20.9	147	202	37.2	254	284	11.5
Total Capital Expenditures in Canada	8530	7185	-15.8	3870	3139	-18.9	4660	4046	-13.2
Total Capital Expenditures Abroad	612	534	-12.7	440	384	-12.6	172	150	-13.1
Total Company Capital Expenditures	9142	7719	-15.6	4309	3523	-18.2	4832	4196	-13.2
	Integrateds & Refiners			Junior O&G Producers			Senior O&G Producers		
Exploration	745	607	-18.5	979	820	-16.2	1272	1015	-20.2
Development	322	132	-59.2	487	391	-19.7	468	252	-46.1
Production	505	612	21.2	449	492	9.7	713	783	10.0
Oil Sands	551	185	-66.5	6	6	6.3	289	113	-60.9
Total Upstream	2123	1535	-27.7	1920	1710	-11.0	2741	2163	-21.1
Total Downstream	1235	1224	-0.9	8	7	-14.6	85	43	-49.2
Uranium	0	0	-	0	0	-	0	1	-
Coal	8	12	52.5	0	0	-	7	3	-53.3
All Others	127	201	58.3	92	78	-14.7	183	206	12.9
Total Capital Expenditures in Canada	3493	2973	-14.9	2020	1795	-11.2	3016	2417	-19.9
Total Capital Expenditures Abroad	49	76	53.2	259	213	-17.7	304	245	-19.2
Total Company Capital Expenditures	3543	3048	-14.0	2279	2008	-11.9	3320	2663	-19.8

B13

Balance Sheet in millions of dollars

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Cash, Investments & Marketable Securities	3592	2245	-37.5	1225	1244	1.5	2367	1002	-57.7
Accounts Receivable:									
Affiliates	690	567	-17.8	365	227	-37.9	325	341	4.8
All Other	6040	6139	1.6	2278	2597	14.0	3762	3542	-5.8
Total	6730	6706	-0.4	2643	2823	6.8	4087	3883	-5.0
Inventories	3479	4235	21.7	1224	1603	30.9	2255	2632	16.7
Other Current Assets	918	882	-3.9	407	364	-10.5	511	518	1.4
Total Current Assets	14719	14068	-4.4	5500	6034	9.7	9219	8034	-12.8
Property, Plant & Equipment	95075	99155	4.3	42512	43858	3.2	52563	55297	5.2
Less:									
Accumulated Depletion Depreciation and Amortization	28698	30606	6.6	13357	13925	4.2	15341	16681	8.7
Net Fixed Assets	65838	69117	5.0	28764	30047	4.5	37074	39069	5.4
Other Long-term Assets	5525	5678	2.8	2719	2520	-7.3	2806	3158	12.5
Total Assets	86082	88863	3.2	36982	38601	4.4	49099	50262	2.4
Accounts Payable:									
Affiliates	611	445	-27.2	113	57	-49.3	498	387	-22.1
All Other	5581	6613	18.5	2413	2807	16.3	3168	3805	20.1
Total	6192	7057	14.0	2526	2864	13.4	3666	4193	14.4
Current Portion of Long-term Debt	763	472	-38.1	256	227	-11.2	507	245	-51.7
Other Current Liabilities	4427	3344	-24.5	2026	1942	-4.1	2401	1402	-41.6
Total Current Liabilities	11381	10873	-4.5	4808	5034	4.7	6574	5839	-11.2
Long-term Debt	18244	21282	16.6	7526	8227	9.3	10718	13055	21.8
Prepayment for Deferred Production	1516	1047	-30.9	589	488	-17.1	927	558	-39.7
Accumulated Deferred Income Taxes	11169	11503	3.0	4650	4765	2.5	6519	6738	3.4
Other Long-term Liabilities	3512	4217	20.1	735	1002	36.2	2776	3215	15.8
Shareholder's Equity:									
Common Shares	15466	16499	6.7	10363	10150	-2.0	5103	6349	24.4
Preferred Shares	5772	4714	-18.3	4661	3398	-27.1	1111	1316	18.4
Retained Earnings	15214	15037	-1.2	1579	3589	127.3	13635	11449	-16.0
Other Equity	3808	3691	-3.1	2072	1947	-6.0	1736	1744	0.5
Total Shareholder's Equity	40260	39942	-0.8	18674	19085	2.2	21586	20857	-3.4
Total Liabilities, Deferred Taxes & Equity	86082	88863	3.2	36982	38601	4.4	49099	50262	2.4
Working Capital	3337	3195	-4.3	692	1000	44.5	2645	2195	-17.0

	Integrateds & Refiners			Junior O&G Producers			Senior O&G Producers		
Cash, Investments & Marketable Securities	2040	480	-76.5	978	997	1.9	574	769	34.0
Accounts Receivable:									
Affiliates	343	147	-57.1	175	206	17.6	173	215	24.6
All Other	3655	3675	0.5	831	823	-1.0	1555	1641	5.6
Total	3997	3821	-4.4	1006	1028	2.2	1727	1856	7.5
Inventories	2872	3634	26.5	126	113	-10.2	481	487	1.4
Other Current Assets	672	586	-12.8	71	41	-42.2	175	255	46.0
Total Current Assets	9582	8522	-11.1	2181	2179	-0.1	2956	3367	13.9
Property, Plant & Equipment	39594	42874	8.3	21271	24284	14.2	34209	31998	-6.5
Less:									
Accumulated Depletion Depreciation and Amortization	13226	13710	3.7	6797	7771	14.3	8675	9125	5.2
Net Fixed Assets	26367	29164	10.6	14280	14980	4.9	25191	24973	-0.9
Other Long-term Assets	2389	2798	17.1	987	985	-0.2	2150	1895	-11.8
Total Assets	38338	40484	5.6	17448	18143	4.0	30297	30235	-0.2
Accounts Payable:									
Affiliates	482	295	-38.8	74	49	-34.7	54	101	87.7
All Other	3092	4036	30.5	772	886	14.8	1717	1691	-1.5
Total	3574	4331	21.2	846	934	10.4	1771	1792	1.2
Current Portion of Long-term Debt	253	99	-60.7	255	194	-24.1	255	179	-29.7
Other Current Liabilities	3025	1699	-43.8	370	493	33.2	1032	1152	11.7
Total Current Liabilities	6852	6129	-10.6	1471	1621	10.2	3058	3123	2.1
Long-term Debt	5396	8697	61.2	3899	3974	1.9	8950	8611	-3.8
Prepayment for Deferred Production	313	184	-41.2	384	341	-11.1	818	521	-36.3
Accumulated Deferred Income Taxes	5795	5874	1.4	1539	1553	0.9	3835	4076	6.3
Other Long-term Liabilities	952	1365	43.4	1259	1156	-8.2	1301	1696	30.4
Shareholder's Equity:									
Common Shares	7338	7248	-1.2	4885	5553	13.7	3243	3699	14.0
Preferred Shares	1696	1209	-28.7	2056	2019	-1.8	2021	1486	-26.5
Retained Earnings	9557	9312	-2.6	528	475	-10.0	5129	5250	2.4
Other Equity	440	466	6.0	1426	1452	1.8	1942	1773	-8.7
Total Shareholder's Equity	19029	18235	-4.2	8895	9499	6.8	12335	12208	-1.0
Total Liabilities, Deferred Taxes & Equity	38338	40484	5.6	17448	18143	4.0	30297	30235	-0.2
Working Capital	2730	2393	-12.3	709	558	-21.4	-102	244	-

B14

Capital Employed by Sector and Segment[1] in millions of dollars

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Upstream	52168	52886	1.4	22618	22776	0.7	29549	30110	1.9
Refining and Marketing	11915	13368	12.2	4929	4859	-1.4	6986	8508	21.8
Other Downstream	3347	3529	5.4	1475	1810	22.8	1873	1718	-8.2
Other Canadian Operations	5230	4778	-8.6	2404	2023	-15.9	2826	2756	-2.5
Total Canadian Operations	72660	74561	2.6	31426	31468	0.1	41234	43092	4.5
Foreign Operations	3348	3429	2.4	1953	2099	7.5	1395	1330	-4.6
Grand Total	76007	77990	2.6	33379	33567	0.6	42629	44423	4.2

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Upstream	14568	15948	9.5	14839	14121	-4.8	22760	22816	0.2
Refining and Marketing	11914	13366	12.2	0	0	-	1	1	42.0
Other Downstream	2561	2690	5.0	111	91	-18.2	675	748	10.8
Other Canadian Operations	2150	2170	1.0	984	1099	11.7	2096	1509	-28.0
Total Canadian Operations	31192	34174	9.6	15935	15311	-3.9	25533	25075	-1.8
Foreign Operations	287	181	-37.0	1005	1211	20.6	2056	2037	-0.9
Grand Total	31480	34355	9.1	16939	16522	-2.5	27589	27112	-1.7

(1) Capital employed is defined as total assets less current liabilities.

B15
Volume and Value of Production

By Province

Volume in thousands of cubic metres	Alberta 1988	Alberta 1989	Alberta Change %	British Columbia 1988	British Columbia 1989	British Columbia Change %	Saskatchewan 1988	Saskatchewan 1989	Saskatchewan Change %
Conventional Crude – NORP	28270.8	29120.3	3.0	929.3	1002.9	7.9	6372.4	6012.0	-5.7
Conventional Crude – Other	26347.0	23358.7	-11.3	929.5	877.3	-5.6	3515.2	3223.7	-8.3
Conventional Crude Oil	54617.8	52479.0	-3.9	1858.8	1880.3	1.2	9887.6	9235.7	-6.6
Oil Sands	18217.0	18527.6	1.7	0.0	0.0	0.0	0.2	0.0	-100.0
Marketable Natural Gas (10^6m^3)	71933.1	72763.6	1.2	7525.0	9775.3	29.9	3311.1	4791.4	44.7
Gas Plant Liquids	16265.4	16329.2	0.4	389.3	327.7	-15.8	146.0	85.2	-41.6
Total (including sulphur)	158493.1	155114.5	-0.9	9445.3	11587.8	22.7	13194.2	13930.7	5.6
Value in millions of dollars			%			%			%
Conventional Crude – NORP	2890.0	3662.9	26.7	100.4	133.4	32.9	528.7	641.8	21.4
Conventional Crude – Other	2863.6	2946.0	2.9	101.4	111.3	9.7	305.6	340.6	11.4
Conventional Crude Oil	5753.6	6608.9	14.9	201.8	244.7	21.2	834.3	982.3	17.7
Oil Sands	1687.0	2084.5	23.6	0.0	0.0	0.0	0.0	0.0	-
Marketable Natural Gas	3935.5	3985.3	1.3	381.4	476.7	25.0	167.3	236.5	41.3
Gas Plant Liquids	1132.2	1196.1	5.6	23.3	19.8	-14.9	9.8	4.3	-56.0
Total (including sulphur)	12508.3	13874.8	10.9	606.4	741.2	22.2	1011.4	1223.1	20.9

By Company Group

Volume in thousands of cubic metres	Total Industry 1988	Total Industry 1989	Total Industry Change %	Canadian-Controlled 1988	Canadian-Controlled 1989	Canadian-Controlled Change %	Foreign-Controlled 1988	Foreign-Controlled 1989	Foreign-Controlled Change %
Conventional Crude – NORP	37804.6	38419.0	1.6	14108.5	15358.6	8.9	23696.1	23060.4	-2.7
Conventional Crude – Other	31125.7	27726.7	-10.9	10544.5	9246.7	-12.3	20581.2	18480.0	-10.2
Conventional Crude Oil	68930.3	66145.7	-4.0	24653.0	24605.3	-0.2	44277.3	41540.4	-6.2
Oil Sands	18217.2	18527.6	1.7	5484.0	5842.0	6.5	12733.2	12685.6	-0.4
Marketable Natural Gas (10^6m^3)	83156.7	87556.1	5.3	36629.3	38972.6	6.4	46527.4	48583.5	4.4
Gas Plant Liquids	16807.6	16750.2	-0.3	6607.2	6790.8	2.8	10200.4	9959.4	-2.4
Total (including sulphur)	182078.0	183407.9	0.7	70747.7	73408.9	3.8	111330.3	109999.0	-1.2
Value in millions of dollars			%			%			%
Conventional Crude – NORP	3678.8	4660.4	26.7	1379.4	1831.9	32.8	2299.5	2828.5	23.0
Conventional Crude – Other	3306.1	3432.9	3.8	1092.5	1143.7	4.7	2213.6	2289.2	3.4
Conventional Crude Oil	6984.9	8093.4	15.9	2471.8	2975.6	20.4	4513.1	5117.8	13.4
Oil Sands	1687.1	2084.5	23.6	607.1	765.4	26.1	1079.9	1319.1	22.1
Marketable Natural Gas	4505.5	4717.8	4.7	1953.5	2055.8	5.2	2552.0	2661.9	4.3
Gas Plant Liquids	1165.9	1220.8	4.7	445.8	468.6	5.1	720.2	752.2	4.5
Total (including sulphur)	14343.4	16116.5	12.4	5478.2	6265.4	14.4	8865.2	9851.0	11.1

Volume in thousands of cubic metres	Integrateds/Refiners 1988	Integrateds/Refiners 1989	Integrateds/Refiners Change %	Junior O&G Producers 1988	Junior O&G Producers 1989	Junior O&G Producers Change %	Senior O&G Producers 1988	Senior O&G Producers 1989	Senior O&G Producers Change %
Conventional Crude – NORP	11085.6	11995.2	8.2	9902.3	10515.1	6.2	16816.7	15908.7	-5.4
Conventional Crude – Other	11307.4	9378.6	-17.1	4097.3	4021.4	-1.9	15721.0	14326.7	-8.9
Conventional Crude Oil	22393.0	21373.8	-4.6	13999.6	14536.5	3.8	32537.7	30235.4	-7.1
Oil Sands	12472.0	12391.8	-0.6	136.0	178.3	31.1	5609.2	5957.5	6.2
Marketable Natural Gas (10^6m^3)	19272.2	21995.7	14.1	25154.7	27418.3	9.0	38729.8	38142.1	-1.5
Gas Plant Liquids	6288.5	5912.5	-6.0	1870.3	1953.7	4.5	8648.8	8884.0	2.7
Total (including sulphur)	58413.6	59682.9	2.2	39816.8	42655.0	7.1	82537.1	79824.0	-3.3
Value in millions of dollars			%			%			%
Conventional Crude – NORP	1068.0	1453.3	36.1	961.9	1243.0	29.2	1648.9	1964.2	19.1
Conventional Crude – Other	1191.2	1196.7	0.5	415.0	464.4	11.9	1699.9	1771.9	4.2
Conventional Crude Oil	2259.2	2650.0	17.3	1376.9	1707.3	24.0	3348.8	3736.1	11.6
Oil Sands	1066.6	1335.9	25.2	16.8	17.5	4.2	603.7	731.1	21.1
Marketable Natural Gas	1156.6	1188.5	2.8	1293.1	1428.8	10.5	2055.8	2100.5	2.2
Gas Plant Liquids	440.7	451.5	2.4	122.8	115.0	-6.3	602.4	654.3	8.6
Total (including sulphur)	4923.2	5625.8	14.3	2809.5	3268.7	16.3	6610.7	7222.0	9.2

B16

Upstream Operating Costs and Royalties in millions of dollars

By Province

	Alberta			British Columbia			Saskatchewan		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Field, Well & Gathering Operations	2136.2	2325.6	8.9	104.2	137.1	31.6	316.9	310.0	-2.2
Natural Gas Processing Plants	483.0	401.3	-16.9	10.1	11.1	9.3	15.1	10.6	-29.7
Oil Sands	1292.1	1387.3	7.4	0.0	0.0	-	0.0	0.0	-
Taxes (excluding Income Taxes)	91.5	115.3	26.1	2.0	2.5	24.4	15.4	18.8	22.1
Operating Overhead	1134.9	1279.7	12.8	28.3	40.3	42.4	121.9	104.0	-14.7
Total Operating Cost	5137.6	5509.1	7.2	144.7	191.0	32.0	469.3	443.4	-5.5
Federal Crown Royalties	0.3	0.5	67.3	0.0	0.0	0.0	0.2	0.3	31.5
Provincial Royalties & Taxes	1860.6	1984.6	6.7	89.2	99.0	11.0	154.1	172.4	11.9
Non-Crown Royalties & Other	347.5	349.2	0.5	18.0	17.6	-2.2	44.8	53.7	19.9
Total Royalties	2208.4	2334.3	5.7	107.2	116.6	8.7	199.1	226.4	13.7

By Company Group	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Field, Well & Gathering Operations	2613.3	2830.4	8.3	1011.2	1135.8	12.3	1602.2	1694.5	5.8
Natural Gas Processing Plants	533.1	442.3	-17.0	203.0	152.5	-24.9	330.0	289.8	-12.2
Oil Sands	1292.1	1387.3	7.4	492.4	580.2	17.8	799.7	807.1	0.9
Taxes (excluding Income Taxes)	109.8	138.8	26.4	38.1	35.2	-7.5	71.7	103.6	44.4
Operating Overhead	1325.1	1469.7	10.9	446.2	499.3	11.9	878.9	970.4	10.4
Total Operating Cost	5873.4	6268.4	6.7	2190.9	2403.0	9.7	3682.5	3865.4	5.0
Federal Crown Royalties	6.1	7.0	15.1	1.4	0.6	-57.7	4.7	6.4	36.2
Provincial Royalties & Taxes	2111.8	2264.3	7.2	709.0	769.0	8.5	1402.8	1495.4	6.6
Non-Crown Royalties & Other	418.6	430.9	2.9	184.4	194.9	5.7	234.2	236.1	0.8
Total Royalties	2536.5	2702.3	6.5	894.8	964.4	7.8	1641.8	1737.9	5.9

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1988	1989	Change %	1988	1989	Change %	1988	1989	Change %
Field, Well & Gathering Operations	760.3	851.8	12.0	699.2	740.8	6.0	1153.9	1237.8	7.3
Natural Gas Processing Plants	152.0	125.3	-17.6	65.5	67.5	3.0	315.5	249.6	-20.9
Oil Sands	810.3	827.9	2.2	2.5	5.7	128.8	479.4	553.8	15.5
Taxes (excluding Income Taxes)	27.1	25.8	-5.0	17.8	20.5	15.4	64.8	92.4	42.6
Operating Overhead	384.9	476.8	23.9	211.9	277.5	30.9	728.2	715.4	-1.8
Total Operating Cost	2134.6	2307.5	8.1	996.9	1112.0	11.5	2741.9	2848.9	3.9
Federal Crown Royalties	4.0	5.8	45.0	1.3	0.3	-74.6	0.8	0.9	10.5
Provincial Royalties & Taxes	654.4	706.1	7.9	407.1	448.5	10.2	1050.3	1109.8	5.7
Non-Crown Royalties & Other	148.1	143.3	-3.3	136.3	157.5	15.6	134.2	130.2	-3.0
Total Royalties	806.6	855.2	6.0	544.6	606.3	11.3	1185.3	1240.8	4.7

B17
Income and Expense Statement: 1980 – 1989 in millions of dollars

Upstream	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Revenues	16084	17305	21047	23964	26675	27973	16990	17936	15762	17171
Royalties and other Payments	4915	4985	5621	6107	6472	6347	3144	3056	2537	2702
PGRT and other Taxes	–	973	1952	2034	2244	2007	452	–	–	–
Total Revenues after Royalties and Taxes	11168	11347	13474	15822	17958	19619	13393	14880	13225	14468
Interest Expenses	–(1)	–(1)	1567	1434	1656	1579	1708	1647	1406	1274
Operating Costs	3461	4636	3993	4205	4705	5253	5217	5078	5792	6203
R&D Costs (excluding Oil Sands)	–(1)	–(1)	72	51	64	68	71	62	81	65
Other Expenses	–(1)	–(1)	126	132	131	167	153	127	124	114
Oil Sands R&D	–(2)	–(2)	57	35	27	36	38	27	37	42
E&D Expensed	1393	1468	982	824	1085	1033	1128	866	1356	1071
Depreciation	369	503	547	691	729	841	887	919	1070	1167
Depletion	576	542	821	1090	1422	1733	2240	1885	2138	2250
Write-offs and Amortization	310	290	419	1045	605	528	1067	874	543	664
Non-cash Charges and E&D	2648	2804	2824	3686	3868	4172	5360	4571	5144	5193
Income before Taxes	5060	3907	4892	6315	7535	8380	883	3395	678	1618
Federal Income Tax(3)	–	1231	1687	2242	2303	2482	757	970	187	405
Provincial Income Taxes	–	196	171	385	605	549	16	151	–162	–25
Current Income Taxes	1035	1427	1858	2627	2908	3031	774	1122	25	380
Income after Current Income Taxes	4025	2479	3034	3688	4627	5349	109	2273	653	1238
Deferred Income Tax	1137	811	1032	1221	1741	1723	32	371	95	437
Net Income after Taxes	2889	1668	1976	2466	2897	3626	78	1902	558	801
Extraordinary Gains or Losses	–	–	100	75	6	–334	–1969	113	229	–177
Net Income after Extraordinary Items	2889	1668	2077	2541	2903	3292	–1891	2015	787	624
Internal Cash Flow	6673	5283	5832	7373	8506	9521	5470	6844	5796	6432

Downstream	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Revenues	24761	30507	31263	30660	31244	33376	26171	27019	26982	28790
Sales, Excise and other Taxes	1813	1810	1811	1777	1935	2314	2972	3963	4251	4668
Total Revenues after Taxes	22949	28697	29452	28883	29310	31062	23200	23056	22731	24121
Cost of Goods Sold	–(1)	–(1)	25115	25351	24930	26276	17672	17291	15653	17089
Interest Expenses	–(1)	–(1)	260	298	361	201	119	94	76	303
Operating Costs	19760	25403	2824	2677	2854	3252	3189	3319	3771	4139
R&D Costs	–(1)	–(1)	68	62	68	80	70	69	86	98
Other Expenses	–(1)	–(1)	159	189	35	43	54	10	7	–2
Depreciation	405	433	446	572	612	686	698	709	761	807
Write-offs and Amortization	24	15	26	61	30	170	–75	17	21	30
Non-cash Charges	430	458	473	634	642	856	623	726	782	838
Income before Taxes	2758	2403	553	–328	420	353	1473	1548	2356	1657
Federal Income Tax(3)	–	607	–175	–346	–17	107	346	431	578	426
Provincial Income Taxes	–	203	–71	–118	–3	19	73	119	212	167
Current Income Taxes	1031	812	–246	–464	–20	126	420	551	791	593
Income after Current Income Taxes	1727	1591	799	137	441	227	1053	997	1566	1064
Deferred Income Tax	195	241	424	213	86	–116	–4	108	136	72
Net Income after Taxes	1532	1350	376	–77	355	344	1057	889	1430	992
Extraordinary Gains or Losses	–	–	44	–9	35	–129	–213	18	49	–69
Net Income after Extraordinary Items	1532	1350	420	–86	389	215	844	907	1479	924
Internal Cash Flow	2157	2049	1273	770	1082	1083	1676	1723	2347	1902

(1) Included in Operating Costs.
(2) Included in E&D Expensed.
(3) Includes Large Corporations Tax.

B17 (continued)
Income and Expense Statement: 1980 – 1989 in millions of dollars

	Other Canadian and Foreign Operations									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Revenues	3403	5174	4912	4640	4788	4914	4459	4235	4257	4190
PGRT, Royalties and other Taxes	83	123	204	76	100	169	108	111	76	61
Total Revenues after Taxes	3320	5051	4708	4563	4689	4745	4351	4124	4181	4129
Cost of Goods Sold	–(1)	–(1)	1265	1679	1243	1360	1379	1612	1233	1488
Interest Expenses	–(1)	–(1)	874	778	784	689	934	551	587	959
Operating Costs	2520	4161	1566	1332	1307	1536	1228	1063	1332	1349
R&D Costs (excluding Oil Sands)	–(1)	–(1)	5	10	10	7	11	3	2	10
Other Expenses	–(1)	–(1)	638	182	183	186	185	136	134	41
E&D Expensed	106	199	96	63	58	68	30	44	203	148
Depreciation	112	241	321	319	374	281	322	274	281	206
Depletion	119	181	224	253	296	470	668	332	407	278
Write-offs and Amortization	–49	–41	455	831	230	203	256	–85	–74	162
Non-cash Charges and E&D	288	580	1097	1466	960	1022	1276	564	818	794
Income before Taxes	512	310	–836	–884	202	–56	–663	195	75	–512
Federal Income Tax(3)	–	–54	–6	54	7	16	–172	–52	48	–155
Provincial Income Taxes	–	4	–7	–15	–49	–26	–32	–45	–1	–129
Current Income Taxes	9	–50	–13	39	–41	–9	–204	–97	47	–284
Income after Current Income Taxes	502	360	–823	–923	243	–47	–459	292	28	–228
Deferred Income Tax	191	134	–144	–30	129	69	–7	7	6	–30
Net Income after Taxes	311	226	–679	–893	115	–116	–452	285	22	–198
Extraordinary Gains or Losses	–	–	8	–	92	–134	–1302	15	–109	–28
Net Income after Extraordinary Items	311	226	–715	–893	206	–250	–1754	300	–88	–226
Internal Cash Flow	790	940	274	543	1203	976	818	856	846	566

	Total Operations									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Revenues	44248	52986	57223	59264	62708	66262	47620	49189	47000	50150
Royalties and other Payments	6811	4985	5621	6107	6472	6347	3144	3056	2537	2702
PGRT and other Taxes	–	2906	3967	3888	4278	4490	3532	4074	4327	4729
Total Revenues after Royalties and Taxes	37437	45095	47410	49269	51957	55425	40944	42060	40137	42718
Cost of Goods Sold	–(1)	–(1)	26380	27031	26173	27636	19051	18903	16886	18577
Interest Expenses	–(1)	–(1)	2701	2510	2800	2469	2761	2291	2070	2537
Operating Costs	25741	34550	8284	8214	8865	10041	9635	9460	10895	11691
R&D Costs (excluding Oil Sands)	–(1)	–(1)	144	122	142	156	153	135	169	173
Other Expenses	–(1)	–(1)	923	503	349	396	392	272	266	152
Oil Sands R&D	–(2)	–(2)	57	35	27	36	38	27	37	42
E&D Expensed	1499	1678	1078	887	1144	1101	1159	910	1559	1219
Depreciation	886	1177	1314	1582	1715	1808	1907	1902	2112	2180
Depletion	695	724	1045	1343	1720	2203	2908	2217	2545	2528
Write-offs and Amortization	285	264	900	1938	865	901	1248	805	489	857
Non-cash Charges and E&D	3366	3842	4394	5786	5470	6050	7259	5861	6743	6825
Income before Taxes	8330	6703	4584	5103	8157	8677	1693	5138	3109	2763
Federal Income Tax(3)	–	1784	1506	1950	2293	2605	931	1350	814	675
Provincial Income Taxes	–	404	92	252	553	542	57	226	49	12
Current Income Taxes	2075	2188	1598	2202	2846	3148	989	1575	863	687
Income after Current Income Taxes	6255	4515	2986	2902	5311	5530	704	3563	2246	2076
Deferred Income Tax	1523	1270	1313	1404	1955	1676	21	486	237	479
Net Income after Taxes	4732	3245	1673	1496	3367	3854	683	3076	2009	1596
Extraordinary Gains or Losses	–	–	153	66	132	–596	–3484	146	170	–274
Net Income after Extraordinary Items	4732	3245	1826	1562	3499	3258	–2801	3223	2179	1321
Internal Cash Flow	9620	8357	7379	8686	10792	11580	7964	9423	8989	8900

(1) Included in Operating Costs.
(2) Included in E&D Expensed.
(3) Includes Large Corporations Tax.

B18
Sources and Uses of Funds: 1980 – 1989 in millions of dollars

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Cash Generated by Operations	9620	8357	7379	8686	10792	11580	7964	9423	8989	8900
Net Increase in Long-term Debt	2720	9655	3556	1853	4261	2087	1900	896	2251	5185
Issue of Shares	1542	2131	3219	2182	1815	2010	2414	1796	2356	2837
Incentives, Grants and others	–	826	1478	1670	1895	1865	1138	509	420	200
All other Sources	798	–	3150	2998	5052	4143	4853	7664	4508	4228
Working Capital Decrease	636	1200	4387	1527	933	2820	3333	2023	4801	1635
Total Sources of Funds	15317	23572	23169	18916	24748	24505	21601	22310	23324	22985
Upstream Capital Expenditures	6881	6863	6491	6820	7992	9305	6274	5543	6785	5408
Downstream Capital Expenditures	782	1646	2180	1611	897	751	725	1126	1189	1177
Other Canadian Capital Expenditures	598	1694	1942	1196	926	881	374	426	556	600
Total Capital Expenditures in Canada	8261	10202	10613	9626	9814	10937	7372	7095	8530	7185
Capital Expenditures in U.S.A.	800	1072	594	328	317	720	145	150	144	130
Other Foreign Capital Expenditures	344	744	568	443	360	473	425	346	468	404
Total Foreign Capital Expenditures	1144	1817	1162	770	677	1193	570	495	612	534
Total Company Capital Expenditures	9405	12019	11775	10397	10491	12130	7942	7591	9142	7719
Dividends:										
Common Shares	n/a	n/a	n/a	n/a	n/a	1514	2260	1166	2041	1083
Preferred Shares	n/a	n/a	n/a	n/a	n/a	283	313	346	425	286
Total	973	1182	1136	1257	1358	1798	2573	1511	2466	1369
Reduction of Equity	204	362	632	568	166	528	452	456	1414	858
Total Dividends and Reduction of Equity	1170	1543	1769	1825	1523	2325	3025	1968	3880	2227
Net Decrease in Long-term Debt	608	554	3561	1545	2576	1884	2931	4575	2681	2102
All other Applications	1640	7085	4784	3117	5652	5953	6783	6135	6150	9430
Working Capital Increase	2487	2370	1281	2032	4504	2212	920	2041	1471	1506
Total Applications of Funds	15317	23572	23169	18916	24748	24505	21601	22310	23324	22985

Appendix C Glossary of Terms

Acquisitions – the acquisition of shares of other petroleum companies or the purchase of assets from such companies. Capital outlays for these purposes are included under the category 'All Other Uses of Funds' in monitoring reports. *(Acquisitions)*

All Other Sources of Funds – proceeds from the sale of assets or long–term investments and pre-payments received for future production and the reclassification of sizeable short-term debt to long-term such as occurred in 1984. *(Autres sources de fonds)*

All Other Uses of Funds – includes acquisitions, purchases of used machinery and equipment, and long-term investments. *(Autres affectations de fonds)*

Amortization – the depreciation, depletion or charge–off to expense of tangible and intangible assets over a period of time. It includes costs associated with mineral properties prior to the time they are developed and entered into production. *(Amortissement)*

Canada Lands – physical areas of Canada outside provincial boundaries. *(Terres du Canada)*

Canadian Control – in general, a company is Canadian-controlled when 50% or more of its voting shares are held by Canadian residents either directly or indirectly. In a few exceptional cases, when a significant block of shares is held by Canadian residents and the remaining shares are widely held, a company may be effectively Canadian-controlled even though more than 50% of the voting shares are held by non-residents. *(Contrôle canadien)*

Canadian Exploration and Development Incentive Program (CEDIP) – provided direct assistance to companies conducting exploration and development activities in Canada. Beginning April 1, 1987, CEDIP provided a cash payment for 33 1/3 % of exploration and development expenses anywhere in Canada, up to a maximum of $10 million annually per company. Fiscal measures proposed under the Income Tax Reform of June 1987, provided for the phasing out of the program over approximately the same period as earned depletion. The CEDIP rate was fixed at 25% effective October 1, 1988, and the 16 2/3% rate was rescheduled to take effect July 1, 1989. The program was to be terminated on December 31, 1989, but was terminated instead on April 27, 1989, subject to specific grandfathering rules. *(Le programme canadien d'encouragement à l'exploration et à la mise en valeur)*

Canadian Exploration Incentive Program (CEIP) – provided up to $3 million in incentives per corporation for each calendar year, based on 30% of eligible expenses to a ceiling of $10 million a year. The $10 million limit was for both the CEIP and CEDIP programs. The CEIP program began for oil and gas exploration on October 1, 1988 when the incentive rate for the CEDIP program fell to 25%. CEIP incentives were limited to exploration expenses incurred under flow-through agreements, where the corporation and the investor were at arms's length. The federal budget of February 20, 1989 announced the early termination of the program, subject to grandfathering provisions. *(Le programme de stimulation de l'exploration au Canada)*

Canadian Ownership – the proportion of the total voting shares of a company held, either directly or indirectly (through other corporations), by Canadian residents. *(Participation canadienne)*

Capital Employed – the net book value of total assets, less current liabilities. *(Capital utilisé)*

Capital Expenditures – investments in new machinery, equipment, structures and resource properties, whether capitalized or charged directly to current operations, as well as intangibles (e.g. cost of leased equipment), capitalized interest and capitalized repair expenditures. *(Dépenses de capital)*

Current Income Tax – the portion of the provision for income taxes, both federal and provincial, pertaining to the reporting period and assumed to be currently due. *(Impôt sur le revenu courant)*

Debt/Equity Ratio – the ratio of long-term liabilities (over one year) to shareholders' equity (share capital plus retained earnings) at the end of a period Depending upon their terms and conditions, preferred shares may be classified as either debt or equity (see 'long-term debt'). *(Rapport d'endettement)*

Deferred Income Taxes – taxes accrued and reflected as an expense in the income statement, but not payable in the financial reporting period. Income taxes are deferred, for example, when companies write off capital assets (using capital cost allowances) for income tax purposes at rates that exceed those employed in preparing their financial reports. *(Impôt reporté)*

Depletion – the amount charged to expense in the company's financial statements which relates to depletable assets that have been capitalized. This is not the earned depletion allowance calculated for income tax purposes. *(Epuisement)*

Depreciation – the amount charged to expense which relates to depreciable assets that have been capitalized. This is not the amount of capital cost allowance that is used to compute depreciation for income tax purposes. *(Dépréciation)*

Development Expenditures – includes drilling and well completion costs in an area of already proven oil or natural gas reserves, expenditures on field gathering and separation systems, and the cost of acquiring proven reserves. *(Dépenses de mise en valeur)*

Downstream Segment – includes refining, marketing, transportation and petrochemical operations. *(Secteur aval)*

Energy Mining – uranium and coal mining (excludes oil sands mining). *(Extraction minière des ressources énergétiques)*

Equity – the book value of shareholders' paid-up capital, contributed surplus and retained earnings. *(Avoir propre)*

Exploration Costs – include all lease fees and land acquisition costs, geological and geophysical expenditures, and exploratory drilling costs whether capitalized or expensed. Exploratory drilling is generally defined as the drilling of a well outside a proven area, or within a proven area but to a previously untested zone, in order to determine whether oil or gas reserves exist. Also included are costs of dry wells, casing and other materials and equipment abandoned in place. *(Frais d'exploration)*

External Sources of Funds – funds obtained from sources other than internal cash flow. Long-term debt and equity are the main examples. *(Sources externes de fonds)*

Extraordinary Item – income and expenses items resulting from transactions that possess a high degree of abnormality and are of a type that would not reasonably be expected to recur in the forseeable future. *(Postes extraordinaires)*

Flow-through Shares – a financial vehicle that allows a resource company to issue shares and thereby raise funds for exploration and development expenditures. In turn, the company renounces the associated tax expenses such as Canadian exploration expenses (CEE), Canadian development expenses (CDE) and Canadian oil and gas property expenses (COGPE) to the purchasers of flow-through shares. Flow-through arrangements permit investors to deduct resource expenses incurred by the issuing corporation against income from other sources. *(Actions accréditives)*

Full Cost Accounting – an accounting method by which all costs incurred in prospecting for reserves and in acquiring, exploring and developing properties within cost centres are initially capitalized and only charged to expense as the reserves deemed to be related to those costs are produced. Costs incurred include prospecting, leasing, acquisition, retention, exploration and development costs, and associated indirect costs (i.e. general and administrative costs). Operating costs are expensed as incurred. *(Méthode de capitalisation du coût entier)*

Integrated Companies – individual companies that have significant revenues in both the upstream and downstream segments. *(Sociétés intégrées)*

Internal Cash Flow – net income after tax plus exploration and development expenditures expensed in the current period, depreciation, depletion, amortization and deferred income taxes. *(Ressources d'autofinancement)*

Junior Producers – companies that are predominantly exploration and production oriented and that individually generate less than 1% of industry upstream revenues. *(Petits producteurs)*

Large Corporations Tax – a tax introduced in the April 27, 1989 federal budget which is levied at a rate of 0.175% on capital in excess of $10 million employed in Canada by corporations. The LCT is not deductible in computing income for tax purposes, but is creditable against the corporate 3% surtax. *(Taxe sur les grandes sociétés)*

Long-term Debt – debt that has a maturity date greater than one year. Preferred shares may be treated as long-term debt when they are redeemable for a fixed amount without conversion privileges or voting rights. *(Dette à long terme)*

Non-cash Charges – items expensed in the reporting period that do not require an actual financial outlay in that period, such as depreciation, depletion and amortization. *(Frais non monétaires)*

Non-conventional Heavy Oil – deposits of oil of a density usually greater than 934 kg/m^3 that are for the most part recoverable through enhanced recovery methods. Canadian deposits of heavy oil are typically in the range of 935 to 985 kg/m^3. Main centres are Cold Lake and Lloydminster. *(Pétrole lourd non classique)*

Oil Sands – crude bitumen resources from deposits that are generally solid unless heated and are of a density usually greater than 985 kg/m^3. Athabasca, Peace River, Wabasca, Cold Lake and Buffalo Head Hills are the main Canadian resource areas. *(Sables pétrolifères)*

Other Canadian Operations – include drilling services, coal and uranium mining, metal mining, and other non-petroleum related activities. In addition, corporate activities may be included here. *(Activités autres au Canada)*

Production Expenditures – all expenditures relating to the production of crude oil and natural gas. Expenditures on natural gas processing plants are included. *(Dépenses de production)*

Senior Producers – companies that are predominantly exploration and production oriented and that individually generate more than 1% of industry upstream revenues. *(Grands producteurs)*

Successful Efforts Accounting – an accounting method by which only costs resulting directly in identifiable future benefits through discovery, acquisition or development of reserves are capitalized. Costs that do not provide identifiable future benefits are expensed as incurred, or are written off when the properties are determined to be non-productive. Such costs include those relating to geological and geophysical studies, retention of undeveloped properties, and non-productive exploration and development efforts. *(Méthode de capitalisation du coût de la recherche fructueuse)*

Upstream Segment – activities and operations related to the search for, and development, production, extraction and recovery of crude oil, natural gas, natural gas liquids and sulphur, as well as the production of synthetic oil. *(Secteur en amont)*

Working Capital – current assets (cash, short-term investments, accounts receivable, inventories) less current liabilities (accounts payable, debts and obligations maturing in less than one year). *(Fonds de roulement)*

Appendix D PMA Terms of Reference

Mandate of the Petroleum Monitoring Agency

The Petroleum Monitoring Agency (PMA) was established initially in 1980 under the Inquiries Act and continues under the Energy Monitoring Act (EMA)[1] after February 1983. The Agency's goals are to provide the federal government and Canadians generally with comprehensive and objective information on and analysis of the financial performance of the petroleum industry in Canada:

(a) to enable the Government of Canada to better plan and develop policies for the management of Canada's energy supplies and resources, and

(b) to provide the Government of Canada and Canadians generally with assurances that those policies are being pursued and are effective.[2]

These goals are accomplished by publishing semi-annual and annual reports based on information received directly from all but the smallest oil and gas companies doing business in Canada.

To provide impartiality of reporting and maintain credibility among users, the PMA was created as a separate and independent agency, with its Chairman reporting directly to the Minister of Energy, Mines and Resources.

The Act, at subsection 5(1), sets out that energy enterprises shall file, twice a year, returns providing data and information relating to:

(a) ownership and control,
(b) sources and application of funds,
(c) exploration, development, production, processing, refining and marketing,
(d) cost and revenues,
(e) deductions, credits, allowances and carry forwards provided under the Income Tax Act,
(f) the distribution and disposition of its revenues and profits,
(g) resources, reserves and properties,
(h) ownership or interest in any other enterprise,
(i) research and development programs, and
(j) other prescribed matters relating to oil and gas production, refining and marketing, and the funds derived from such activities.

Energy enterprises are defined as individuals, corporations, partnerships, trusts or organizations engaged in the exploration for, development, refining and marketing of oil and gas and having consolidated gross annual revenues or assets in excess of ten million dollars. Regulations prescribe that gross revenues and assets be determined according to accounting standards set out in the Canadian Institute of Chartered Accountants Handbook. Currently only corporations are surveyed by the Agency. Each energy corporation is required to report on a consolidated basis on the activities of corporations it controls or owns.

Sources of Data and Information

The data published in The Canadian Petroleum Industry *Monitoring Report* are aggregate data derived mainly from survey schedules prescribed by regulations.[3] Since part of the Agency's information gathering function falls within areas covered by Statistics Canada, a number of data sharing agreements were negotiated between PMA and Statistics Canada under section 11 of the Statistics Act. These agreements reduce the industry's response burden in relation to the Agency's overall information requirements. Information also flows from PMA to Statistics Canada. Current data sharing agreements relate to:

- ownership and control of energy enterprises,
- capital structure,
- international flows of funds,
- research and development expenditures,
- exploration, development and capital expenditure intentions,
- quarterly corporate financial statistics, and
- capital expenditures and operating costs.

The first five of these involve transmission of information to the PMA; the last includes information on such subjects as exploration, development and production expenditures, and royalties from the PMA to Statistics Canada.

(1) S.C. 1980-81-82-83, c. 112.
(2) P.C. 1980-2137.
(3) Currently prescribed schedules are contained in Regulation SOR/89-531

Data Coverage

Industry gross revenues covered by the PMA through aggregation of returns from 120 reporting enterprises account for 90% of upstream industry revenues as determined by Statistics Canada. The remaining 11% of industry revenues accrue to firms having revenues or assets below the Agency's current reporting thresholds. The high degree of coverage of industry revenues and the inclusion of all but the smallest energy enterprises enable conclusions drawn from Agency aggregates to be applied to the industry as a whole. Degrees of coverage of other performance indicators are presented below.

Comparison of PMA Data with 1989 Industry Aggregates
Percentage of industry aggregates covered

Upstream Production Revenues	90
Upstream Expenditures in Canada	89
Production Volumes:	
Crude Oil and Liquids	90
Marketable Natural Gas	91
Refined Product Sales Volumes	97

Comparison of Survey Results – PMA vs. Statistics Canada

The petroleum industry's financial performance is regularly compared to that of other sectors of the economy using aggregate data from Statistics Canada. Net income and rates of return information provided in Chapters 1 and 2 of this report will differ slightly from the results shown in Chapter 3 because the latter is based on Statistics Canada data.

Petroleum industry data from Statistics Canada, while covering a greater number of companies than the PMA survey, exclude government business enterprises as well as the foreign activities of Canadian petroleum companies. The PMA survey covers the global activities of petroleum companies operating in Canada, including Crown corporations, provided these companies meet the minimum requirements in terms of assets and revenues. In addition, though Statistics Canada may make adjustments to company reported data, the PMA reports only on the industry's activities as they are submitted. For example, in 1983, a write-down by one large Canadian-controlled company of assets of $1 billion was treated as 'extraordinary' by Statistics Canada, whereas the Agency accepted the entry as 'ordinary', as reported by the company.

Regarding rates of return, both agencies determine return on capital employed by adding back to net income the after-tax portion of interest on long-term debt. While the PMA produces this calculation for each company individually, using the statutory tax rate on that portion of interest expense which would increase net income, the add back on Statistics Canada aggregate industry results must rely on the average effective tax rate, i.e. current taxes as a percentage of net income before taxes.

Ownership and Control Determination

The PMA publishes information annually on the level of Canadian ownership and control of the oil and gas industry in Canada. The methodology and sources of information underlying its analyses are summarized below.

In the process of control determination, the Agency has based its definition on whether Canadian or foreign shareholders have potential control over a reporting enterprise's overall operations. Control is a contractual right conferred upon a person, or group of persons, to direct, within the limitations of relevant statutes, in the present or at some future date, the affairs or management of a company, on a day to day basis or otherwise, usually through the appointment of a majority of a board of directors. Control is not to be confused with managerial responsibility for the firm. The concept of control emerged in order to recognize the separation in modern corporations between managers and shareholders. Shareholders assert control over management through the board of directors and the shareholders' meeting.

Control that is exercised by, for instance, nominating and electing the majority of the directors is active control. Control is just as real when the shareholder with a continuing right to intervene chooses instead, for whatever reason, not to exercise that right. The latter unexercised option to take active control is called potential control. For the purposes of the PMA, the two types of control – active and potential – are equivalent. Both types are called control. The Canadian Business Corporations Act similarly embraces the concept of potential control within its definition of control which refers to sufficient votes, "*if exercised*, to elect a majority of the directors of the body corporate."

While control is generally based on the ownership of 50% or more of voting shares, it is possible for control to be exercised with a smaller ownership block. A person who owns at least 51% of the voting shares is said to have "de jure" control. One who owns less than 50% of the voting shares, but is able to alter the composition of the board of directors and/or management, is said to have "de facto" control. Statistics Canada assigns "de facto" control of a public corporation, for the purposes of the Corporations and Labour Unions Return Act (CALURA), to a person owning at least 20% of the outstanding voting shares when no other two shareholders together own as much as 20%.(1) The PMA methodology for determining control in such cases is consistent with that used by Statistics Canada. "De facto" control may also be conferred upon a person, or group of persons, owning less than 51% of the voting shares of a public or private corporation through several other mechanisms:

(a) *Blocks of voting shares* – Two or more shareholders whose holdings together sum more than 50% of total shares and who generally act in concert.

(b) *A shareholders' agreement* – An agreement among some or all shareholders to vote or act in certain ways in various contingent circumstances, especially in relation to naming directors.

(c) *Options* – A minority shareholder enjoys the right at any time to acquire additional voting shares to raise his holdings to 51% or more of the outstanding voting shares.

(d) *Personal Relationships* – Where two shareholders are related by blood relationship, marriage or adoption, they may be deemed to constitute a voting group.

(e) *Interlocking Directorships* – When corporation A owns at least a minimum percentage of voting shares of corporation B, and is the single largest minority shareholder of corporation B, and both corporations share a large number of common directors, corporation A is said to control corporation B.

For purposes of determining the industry-wide level of control, 100% of the relevant yard stick of the controlled company is assigned to the appropriate control category. Thus, regardless of the percentage ownership of voting rights by non-residents, if the company is effectively controlled by non-residents, then for statistical purposes 100% of its activities are assigned to the foreign-controlled sector. To illustrate, several integrated companies included in this report, though all foreign controlled, have varying degrees of Canadian ownership (up to 30%). However, when measuring the level of control the entirety of their relevant corporate activities is assigned to the appropriate control sector.

In the case of ownership, that percentage of the relevant yardstick which represents the beneficial ownership of formal equity by non-residents is assigned to the foreign-owned category, while that of Canadian residents is assigned to the Canadian-owned category.

The most commonly used yardsticks are upstream or total petroleum-related revenues (upstream plus downstream). Ownership and control are generally measured on gross revenues recognizing that these best reflect economic activity and that they are a stable proxy for net economic benefits over time. For example, the deduction of royalties from gross petroleum revenues would have little or no impact on the relative distribution of revenue between Canadian and foreign owners.

Other measurement bases such as assets or capital employed do exist but suffer from the deficiencies of relying upon historical 'book' values rather than current market value, and of being subject to the different accounting techniques used in the petroleum industry such as the full cost and successful efforts methods.

The Agency has access to ownership and control information collected under CALURA from those enterprises which report under the EMA. CALURA requires detailed disclosure of ownership information from all owners of blocks of shares equal to or greater than 5% of total voting shares. Should a reporting energy enterprise fail to file a timely return under CALURA, Regulation SOR/85-328 authorizes the Agency to obtain the ownership and control information directly.

(1) *The Ownership, Control, and Country of Control of Corporations*, Statistics Canada, June 4, 1987, p. 8.

Recently, the Agency took steps to 'look through' the nationality and ownership of nominee holdings deemed to be Canadian due to the residence of the nominee regardless of that of the beneficial owner. Energy enterprises were requested to grant the PMA access to their Holders of Record listings held by depositories in Canada and the U.S.A. In several instances, such information revealed a significantly lower degree of beneficial Canadian ownership than reported in CALURA information. The results of this activity will be published in future monitoring reports.

Inter-period Comparability of Results

The Canadian Petroleum Industry Monitoring Report presents comparisons of the current reporting period's results with those of previous comparable periods. Such comparisons are sensitive to changes in the list of reporting companies defined as the 'industry', in its analytic groups, i.e. integrateds and refiners, and oil and gas producers, and in the control status of reporting enterprises. To permit valid inter-period comparisons, the Agency consistently fixes industry group membership and control according to the reported information for the current period, and imposes that membership and control on results for the prior reporting period. Where data covering more than two years are presented, the group membership and control is that prevailing at the time of reporting, except for the immediately preceeding period.

Lists of reporting enterprises (i.e. corporations with more than $10 million in assets or sales) are updated each reporting period. Newly qualifying enterprises are added to the industry aggregates and the respective group only when results for two comparable reporting periods are available. Occasionally, enterprises exit from the industry during the current period, by acquisition or wind-up. Prior period results for both the industry and the group presented in the current period's report will reflect the exit of the former reporting enterprise: the enterprise is excluded from the current and the prior period aggregates. Should the exit result from acquisition by a reporting enterprise, the acquired enterprise's prior period results are added to those of the acquiring enterprise regardless of whether the acquired enterprise was in the same analytic group as the acquisitor.

Divestitures or acquisitions by reporting enterprises during the current period may result in an enterprise satisfying the inclusion criteria of an analytic group other than that to which it has been assigned in the prior period's Monitoring Report. For example, where an integrated group member divested itself of its downstream operations during the current period, it would be included in either the senior or junior producer group, depending upon the facts of the matter, for the current period and with that group's aggregate results for the corresponding prior period. It is important to note that all the divesting enterprise's prior period assets and revenues, regardless of the segment of operations, are transferred to the current period analytic group to establish prior period analytic group aggregates.

Similar adjustments to industry and analytic group aggregates are made in cases where ownership switches from Canadian to foreign or vice versa. The current period nationality of ownership determines that of the prior period for purposes of inter-period comparisons. However, in that part of the annual Monitoring Report dealing with ownership and control, the analysis takes into account the changes in the control of the reporting companies as they occur.

Appendix E Reporting Energy Enterprises

Alberta Energy Company Ltd.
Alberta Oil Sands Equity
Altana Exploration Company
Altex Resources Ltd.
Amerada Minerals Corporation of Canada Ltd.
American Eagle Petroleums Ltd.
American Trading and Production Corporation
Amoco Canada Petroleum Company Ltd.
Anadarko Petroleum of Canada Ltd.
Anderson Exploration Ltd.
AT&S Exploration Ltd.
ATCOR Ltd.
Atlantis Resources Ltd.
Barnwell of Canada, Limited
Bow Valley Industries Ltd.
Bowtex Energy (Canada) Corporation
BP Canada Inc.
Bralorne Resources Limited
Buttes Resources Canada Ltd.
Cabre Exploration Ltd.
Canada Northwest Energy Limited
Canadian Conquest Exploration Inc.
Canadian Hunter Exploration Ltd.
Canadian-Montana Gas Company Limited
Canadian Occidental Petroleum Ltd.
CANPEX Co. Ltd.
Canterra Energy Ltd.
Carlyle Energy Ltd.
Chauvco Resources Ltd.
* Chevron Canada Limited
Chevron Canada Resources Limited
Chevron Standard Limited
Chieftain Development Co. Ltd.
Cimarron Petroleum Ltd.
CN Exploration Inc.
Coho Resources Limited
Colonial Oil & Gas Limited
Columbia Gas Development of Canada Ltd.
Conoco Canada Limited
Consolidated Norex Resources Corp.
Consolidated Trans-Canada Resources Ltd.
Conwest Exploration Company Limited
Cooperative Energy Development Corporation
Coseka Resources Limited
Czar Resources Ltd.
DEKALB Energy Canada Ltd.
Denison Mines Limited
Discovery West Corp.
Dorset Energy Corporation
Dynamar Energy Ltd.
Dynex Petroleum Ltd.
Encee Group Ltd.
Encor Inc.
Enerplus Resources Corporation
Enron Oil Canada Ltd.
Excel Energy Inc.
* Federated Co-operatives Limited
Forest Oil Corporation (Canada)
Gardiner Oil and Gas Ltd.
Gulf Canada Resources Limited
Hamilton Brothers Canadian Gas Company
Harvard International Resources Ltd.
Home Oil Company Limited
* Husky Oil Ltd.
ICG Resources Ltd.
* Imperial Oil Limited
Intensity Resources Ltd.
Inverness Petroleum Ltd.
* Irving Oil Limited
J.M. Huber Corporation
Joss Energy Ltd.
Kerr-McGee Canada Ltd.
Kerr-McGee Corporation
Koch Exploration Canada Ltd.
Ladd Exploration Company
LASMO Canada Inc.
LL&E Canada, Ltd.
Lone Pine Resources Ltd.
Luscar Limited
Maligne Resources Limited
Mannville Oil & Gas Ltd.
Mark Resources Inc.
* McColl-Frontenac Inc.
Mobil Oil Canada, Ltd.
* Mohawk Oil Canada Limited
Morgan Hydrocarbons Inc.
Morrison Petroleums Ltd.
Mosbacher Holding 1988C Ltd.
Murphy Oil Company Ltd.
* New Grade Energy Inc.
* Newfoundland Processing Limited
Norcen Energy Resources Limited
North Canadian Oils Limited
Northstar Energy Corporation
Norwich Resources Canada Ltd.
* NOVA Petrochemicals Inc.
Nova Scotia Resources Limited
Novalta Resources Inc.
Numac Oil & Gas Ltd.
Oakwood Petroleums Ltd.
Ocelot Industries Ltd.
Omega Hydrocarbons Ltd.
Orbit Oil & Gas Ltd.
Paloma Petroleum Ltd.
Panarctic Oils Ltd.
Panatlas Energy Inc.
PanCanadian Petroleum Limited
Pancontinental Oil Ltd.
Paramount Resources Ltd.
* Parkland Industries Ltd.
Pecten Canada Limited
Pembina Resources Limited
Penn West Petroleum Ltd.
Pennzoil Petroleums Limited
* Petro-Canada Inc.
Petrorep (Canada) Ltd.
Phillips Petroleum Canada Ltd.
Phillips Petroleum Company Western Hemisphere
Phillips Petroleum Resources Ltd.
Pinnacle Resources Ltd.
Placer CEGO Petroleum Limited
Poco Petroleums Ltd.
Ranchmen's Resources Ltd.
Ranger Oil Limited
Renaissance Energy Ltd.
Rife Resources Ltd.
Roan Resources Ltd.
Royal Trust Energy Corporation
Saskatchewan Oil & Gas Corporation
Sceptre Resources Limited
* Shell Canada Limited
Star Oil & Gas Ltd.
Summit Resources Limited
* Suncor Inc.
Tarragon Oil & Gas Ltd.
Texaco Canada Petroleum Inc.
Tintagel Energy Corporation
Total Petroleum (North America) Ltd.
Trical Resources Inc.
Trilogy Resources Corporation
Triton Canada Resources Ltd.
* Turbo Resources Limited
* Ultramar Canada Inc.
Ultramar Oil and Gas Canada Limited

* Denotes companies included in group of 'Integrateds and Refiners'.
All other companies belong to the category of 'Oil and Gas Producers'

Union Pacific Resources inc.
United Tri-Star Resources Ltd.
Unocal Canada Limited
Voyager Energy Inc.
Wainoco Oil Corporation
Webb International Minerals Inc.
Wellore Energy Inc.
Westar Petroleum Ltd.
Westcoast Petroleum Ltd.
Western Decalta Petroleum (1977) Limited
Westmin Resources Limited